Date of issue	2021-10-11
Version	1.0
Total pages	55

Test report of
IES LM-79-08
Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Applicant:

RAB Lighting Inc

Address:

Northvale, New Jersey, 07647, USA

For Product:

LED Corn Lamp

Model No.:

HIDFA-36S-XXX-8CCT-BYP/3SP
(XXX indidates base type, can be E26 or EX39)

Test laboratory: Shenzhen Belling Efficiency Testing Lab Co.,Ltd, 1Floor, No.1 Building, Meibaohe Industrial Park, Dalang Street, Longhua District, Shenzhen, Guangdong Prov.518101 China.

Jaky Li

Jason zhou

Complied by: Jaky Li **Review by: Jason zhou**

Project Engineer **Technical Manager**

Note: The test data was only valid for the test sample(s). This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or use in part without prior written consent from Shenzhen Belling Efficiency Testing Lab Co.,Ltd. This report must not be used by the customer to claim product certification, approval, or endorsement By NVLAP, NIST, or any agency of the U.S. Government.

1 General

1.1 Product Information

Manufacturer	RAB Lighting Inc
Manufacturer Address	Northvale, New Jersey, 07647, USA
Brand Name	RAB
Luminaire Type	LED Corn Lamp
Model Number	HIDFA-36S-XXX-8CCT-BYP/3SP (XXX indidates base type, can be E26 or EX39)
Rated Inputs	AC 100-277V, 50/60Hz
Rated Power	36 W
Color-Tunable Product	Yes, CCT setting: 3000K / 4000K / 5000K
Date of Receipt Samples	2021-08-16
Date of test	2021-08-17 to 2021-08-27
Burning Time Before Test	0hour(For New Products)

1.2 Standards or methods

- ANSI C78.377-2017:Specifications for the Chromaticity of Solid State Lighting Products
- ANSI C82.77-10:2014:Harmonic Emission Limits - Related Power Quality Requirements for Lighting Equipment - Solid State
- CIE Publication No.13.3-1995:Method of Measuring and Specifying Color Rendering of Light Sources
- IESNA LM-79-08 Approved Method: Electric & Photometric Measurement of Solid-state Lighting Products

1.3 Description

- Declaration: RAB Lighting Inc declare that their product with model HIDFA-36S-XXX-8CCT-BYP/3SP are the same to the product in the report BL210817008-9 and is authorized by original applicant to use their test data.
- Note:All the data in previous report BL210817008-9 is shared in report.

1.4 Equipment list

Device	Manufacture	Model No.	Serial No.	Calibration due date
Goniophotometric System	SENSING	GMS-3000	N.A	2022-03-31
AC Power Source	ALL POWER	APW-110N	992257	2022-03-31
Total Luminous Flux Standard Lamp	SENSING	110V/100W	S1510065	2022-04-07
Total Spectral Radiant Flux Standard Lamp	SENSING	12V/20W	LSD12201731	2022-04-07
Digital Power Meter	YOKOGAWA	WT310	C2QM02030V	2022-03-31
Integral Sphere	SENSING	SPR-600M	N.A	2022-03-31
Digital Power Meter	YOKOGAWA	WT210	91L929742	2022-03-31
Optical Color and Electrical Measurement System	SENSING	SPR-3000	S1101108	2022-03-31
Environment Measurer	XUYAO	HS-1	N/A	2022-04-03
Environment Measurer	XUYAO	HS-1	N/A	2022-04-03
Stop watch	KISLO	K610	N/A	2022-04-22
Digital Anemometer	TECMAN	TD8901	026141	2021-09-09

Statement of Traceability: Shenzhen Belling Efficiency Testing Lab Co.,Ltd attests that all calibration has been performed using suitable standards traceable to national primary standards and International System of Unit (SI).

2 Test conducted and method

2.1 Ambient Condition

The ambient temperature in which measurements are being taken was maintained at 25°C ±1°C, the air flow around the sample(s) being tested did not affect the performance.

2.2 Power Supply Characteristics

The AC power supply had a sinusoidal voltage wave shape at the prescribed frequency (60 Hz) such that the RMS summation of the harmonic components does not exceed 3 percent of the fundamental during operation of the test item.

The voltage of AC power supply (RMS voltage) applied to the device under test was regulated to within±0.2 percent under load.

2.3 Seasoning and Stabilization

No seasoning was performed in accordance with IESNA LM-79-08. And before the measurement, the sample was stabilized until the light output and power variations were less than 0.5% in 30 minutes intervals (3 readings, 15 minutes apart).

2.4 Integrating Sphere System

The system includes AC power source, digital power meter, DC power supply, spectrophotometer, and integrating sphere. The integrating sphere system is calibrated by standard light source before measurement. The system and standard light source has been calibrated regularly and traceable to the National Primary Standards. 4π geometry was used during measurement. The product was operated in its intended orientation in application and was recorded in this report.

Integrating Sphere Uncertainty: The uncertainty of the light output (luminous flux) measurements is U=1.8% (K=2), at the 95% confidence level. The uncertainty of the correlated color temperature measurements is U=20K (K=2), at the 95% confidence level. The uncertainty of the CRI is U=1.8(K=2), at the 95% confidence level. The uncertainty of power meter AC current U=0.18% of rdg, AC Voltage U=0.16% of rdg, Power U=0.20% (K=2), at the 95% confidence level.

2.5 Goniophotometer System

The goniophotometer system is calibrated by standard light source before measurement. The standard light source has been calibrated regularly and traceable to the National Primary Standards.

Type C goniophotometer was used for measuring total luminous flux, luminous intensity distribution, and color spatial uniformity. The product was operated in its intended orientation in application and was recorded in this report. The method according to IESNA LM-79-08 following chapter.

Goniophotometer Uncertainty :The uncertainty of the luminous intensity is U=1.6% (K=2), at the 95% confidence level.

3 Test Result Summary

3.1 Integrating Sphere System (Total operating time for integrating sphere test: 1.0 hour)

3.1.1 Model Number: HIDFA-36S-XXX-8CCT-BYP/3SP, 3000K at 120V

Electrical data

Input Voltage(V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
119.94	60	0.308	36.48	0.988

Photometric data

Luminous Flux (lm)	Efficacy (lm/W)	CCT (K)
4913.88	134.7	3021

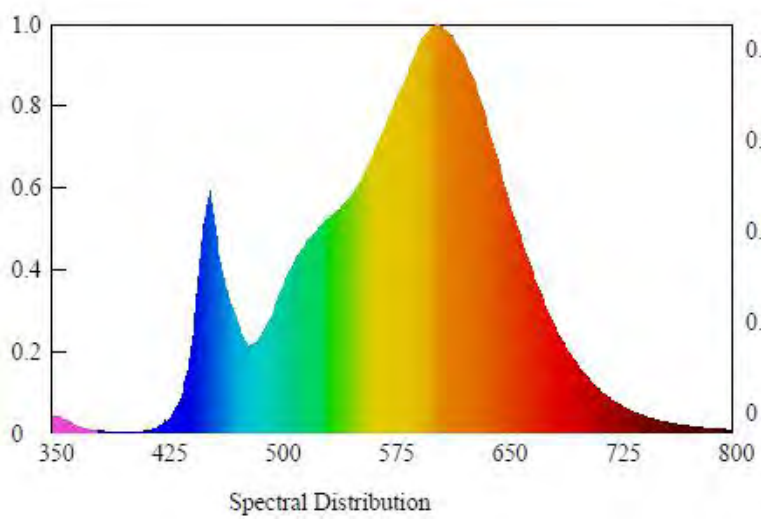
Chromaticity Coordinate

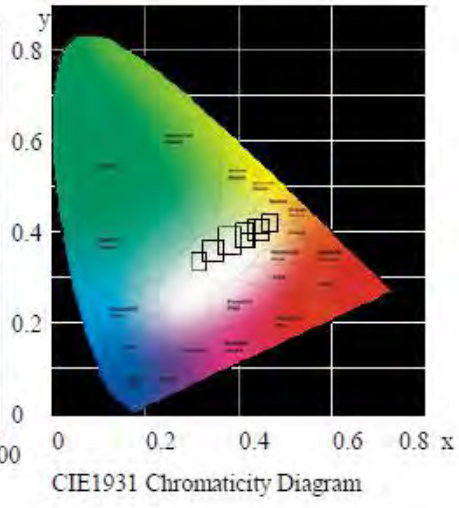
Duv	x	y	u'	v'
-0.00107	0.4339	0.4004	0.2502	0.5195

Color Rendering

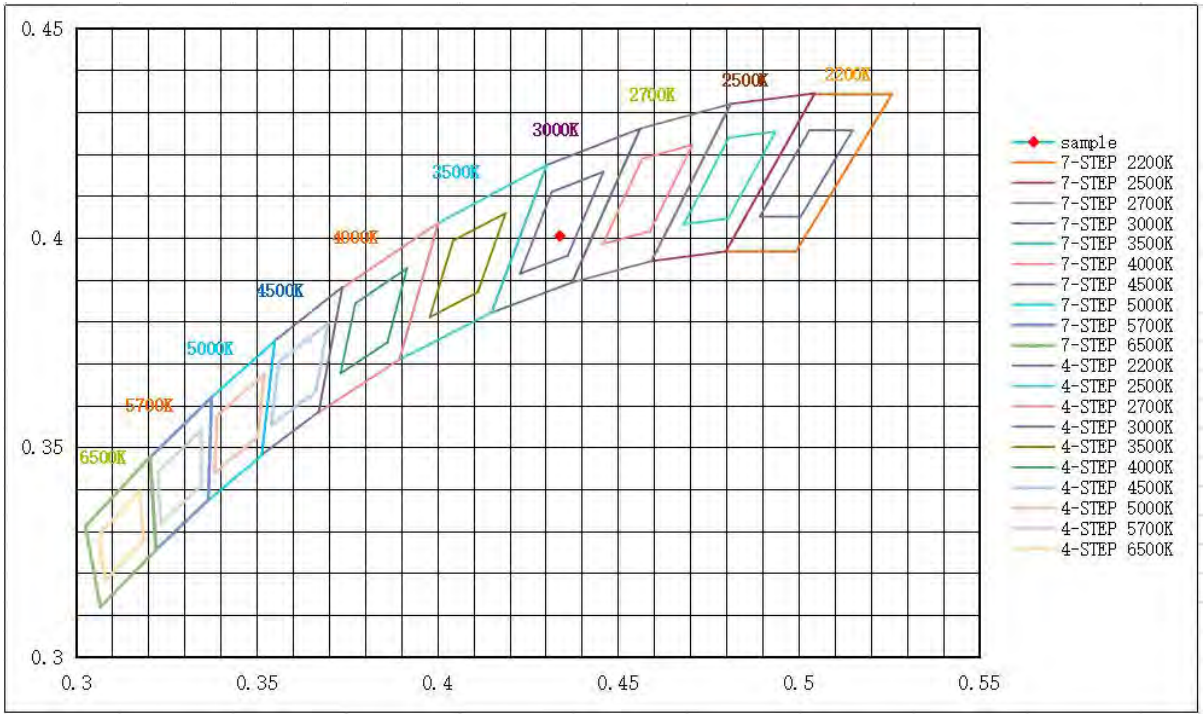
CRI	R9	Rf	Rg	Rcs,h1(%)
85.6	19	86	96	-10

Spectral Distribution



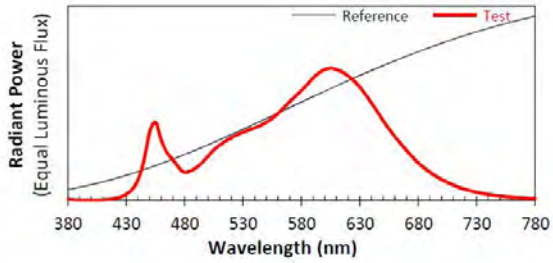


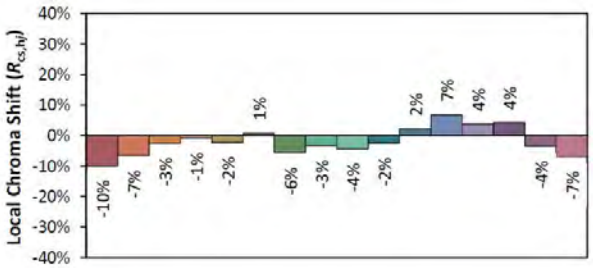
7/4 Step Quadrangle

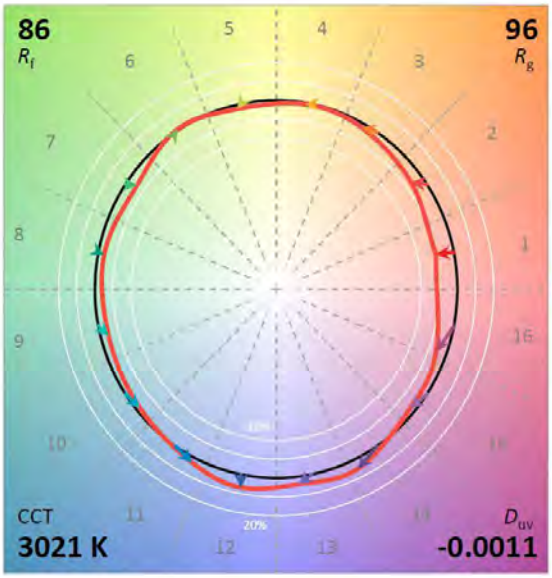


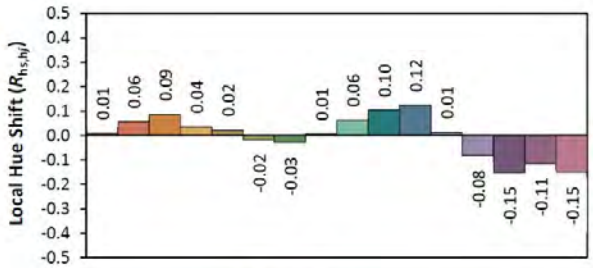
ANSI/IES TM-30-18 Color Rendition Report

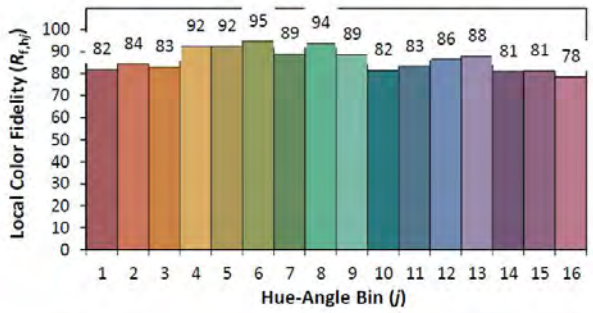
Source:	BL210817024-9	**Manufacturer:**	RAB Lighting Inc
Date:	2021-10-11	**Model:**	HIDFA-36S-XXX-8CCT-BYP/3SP, 3000K at 120V

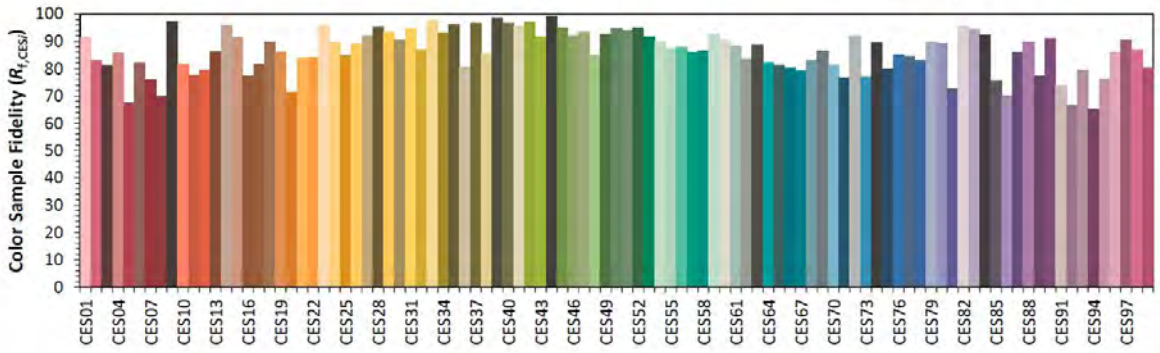












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.4339
y	0.4004
u'	0.2502
v'	0.5195

CIE 13.3-1995 (CRI)

R_a	86
R_9	19

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

3.1.2 Model Number: HIDFA-36S-XXX-8CCT-BYP/3SP, 4000K at 120V

Electrical data

Input Voltage(V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
119.98	60	0.298	35.34	0.988

Photometric data

Luminous Flux (lm)	Efficacy (lm/W)	CCT (K)
5230.35	148.0	3925

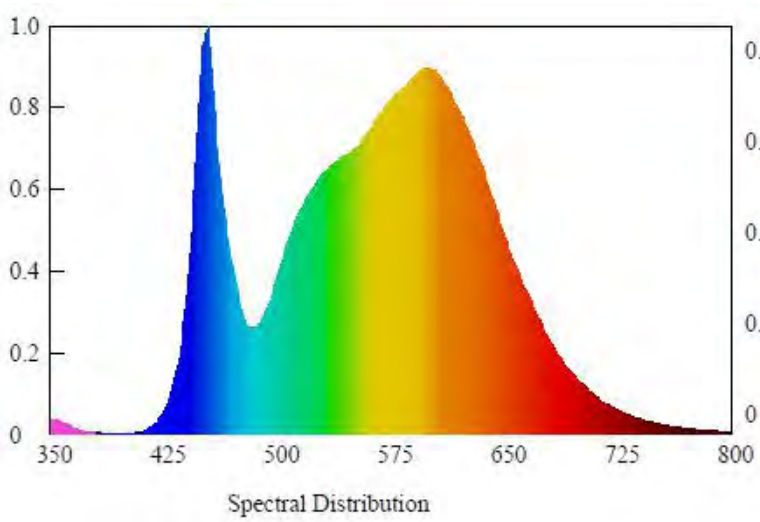
Chromaticity Coordinate

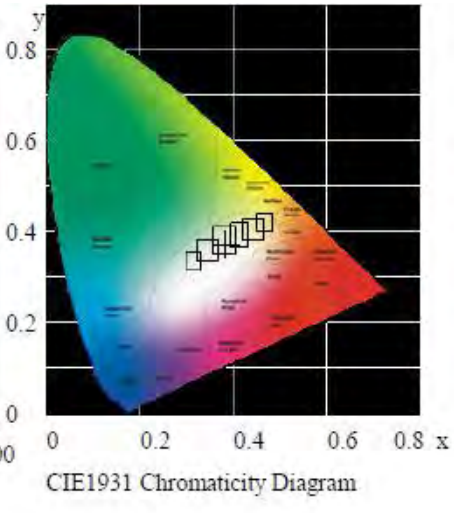
Duv	x	y	u'	v'
-0.0018	0.3825	0.3742	0.2275	0.5007

Color Rendering

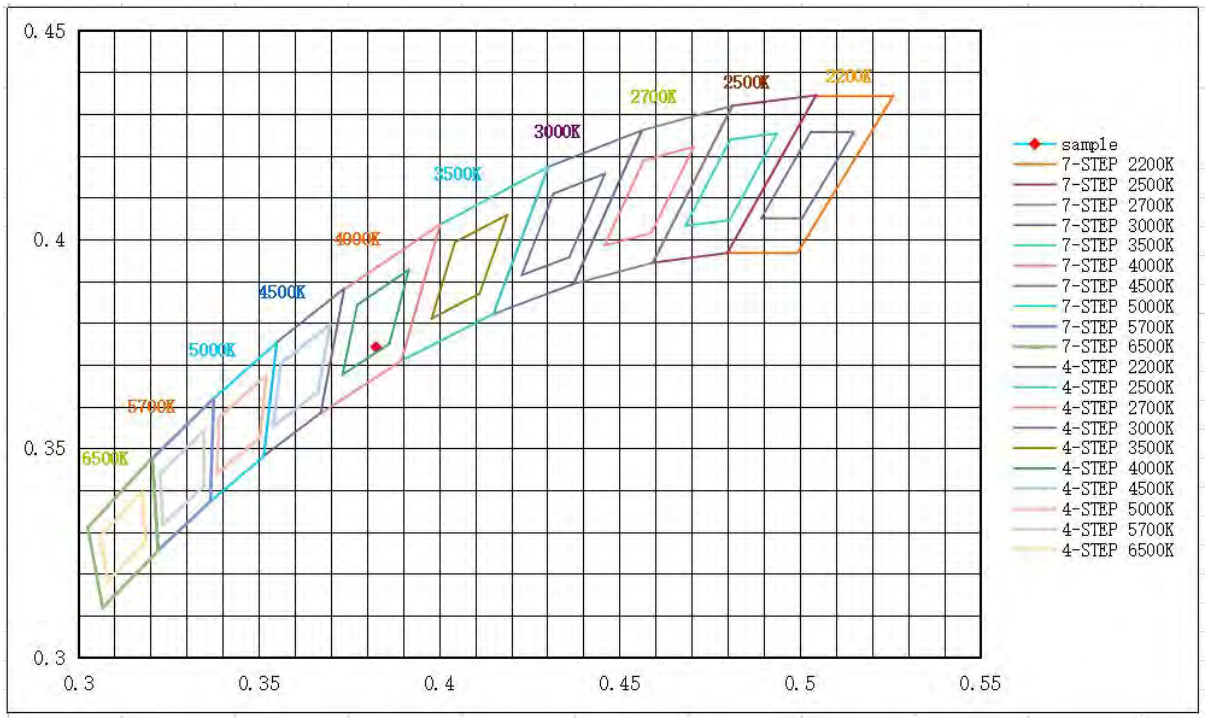
CRI	R9	Rf	Rg	Rcs,h1(%)
85.4	22	85	96	-10

Spectral Distribution



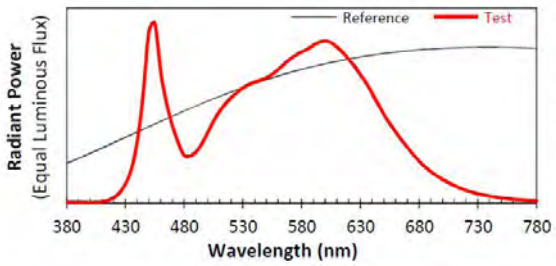


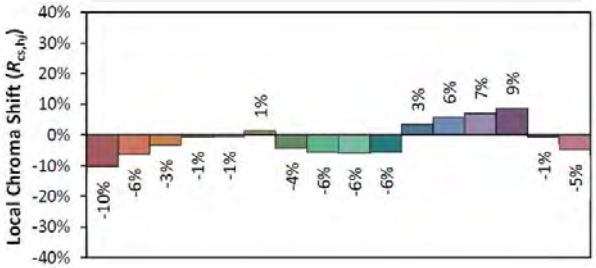
7/4 Step Quadrangle

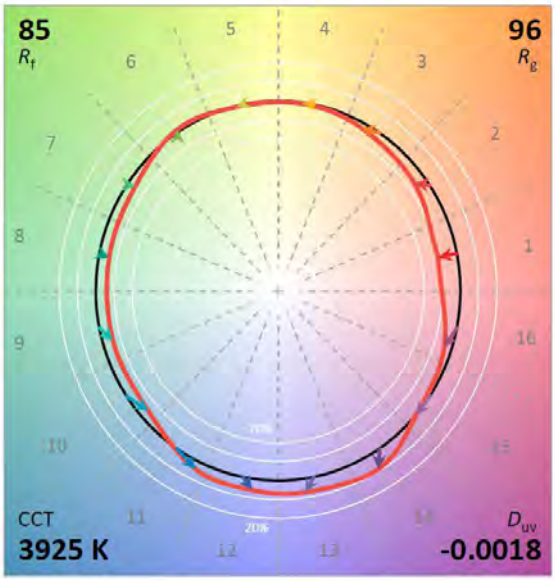


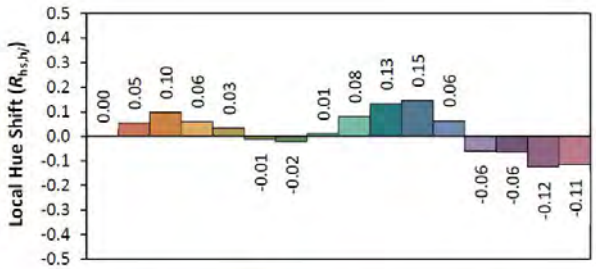
ANSI/IES TM-30-18 Color Rendition Report

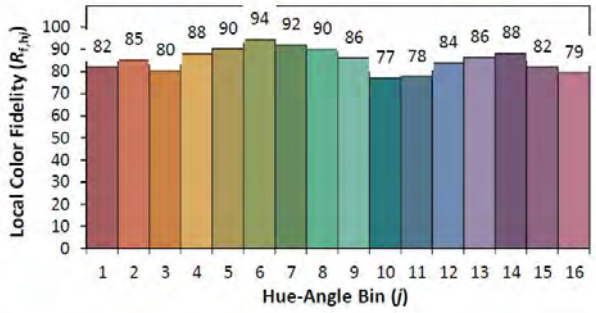
Source:	BL210817024-9	**Manufacturer:**	RAB Lighting Inc
Date:	2021-10-11	**Model:**	HIDFA-36S-XXX-8CCT-BYP/3SP, 4000K at 120V

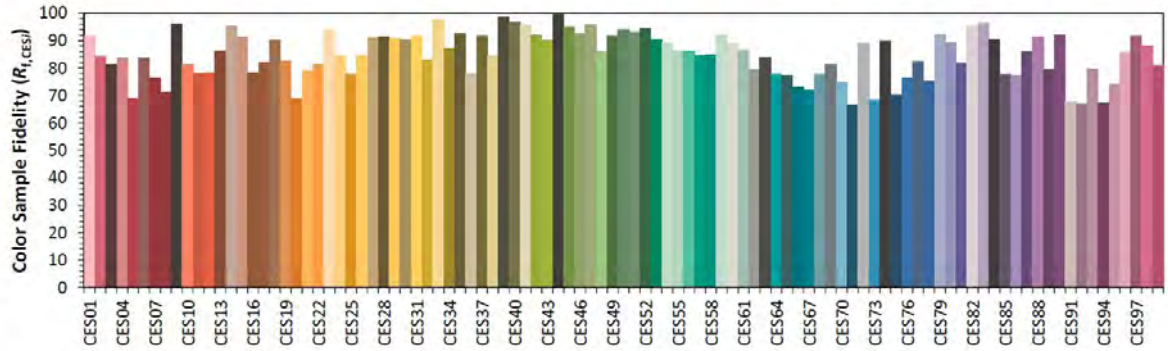












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.3825
y	0.3742
u'	0.2275
v'	0.5007

CIE 13.3-1995 (CRI)

R_a	85
R_9	22

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

3.1.3 Model Number: HIDFA-36S-XXX-8CCT-BYP/3SP, 5000K at 120V

Electrical data

Input Voltage(V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
119.98	60	0.305	36.11	0.988

Photometric data

Luminous Flux (lm)	Efficacy (lm/W)	CCT (K)
5207.07	144.2	4833

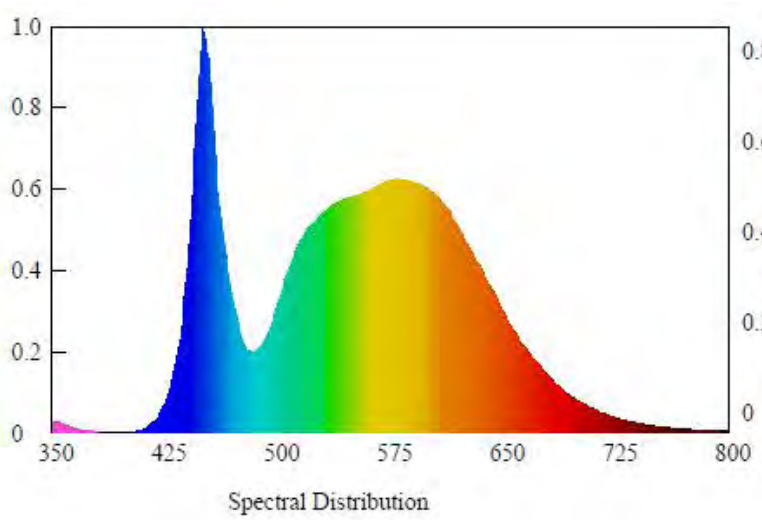
Chromaticity Coordinate

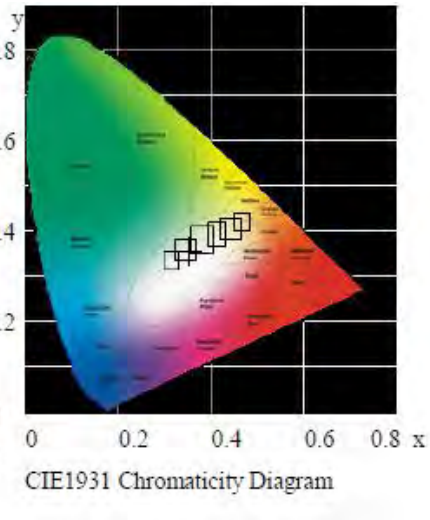
Duv	x	y	u'	v'
+0.0011	0.3503	0.3579	0.2125	0.4885

Color Rendering

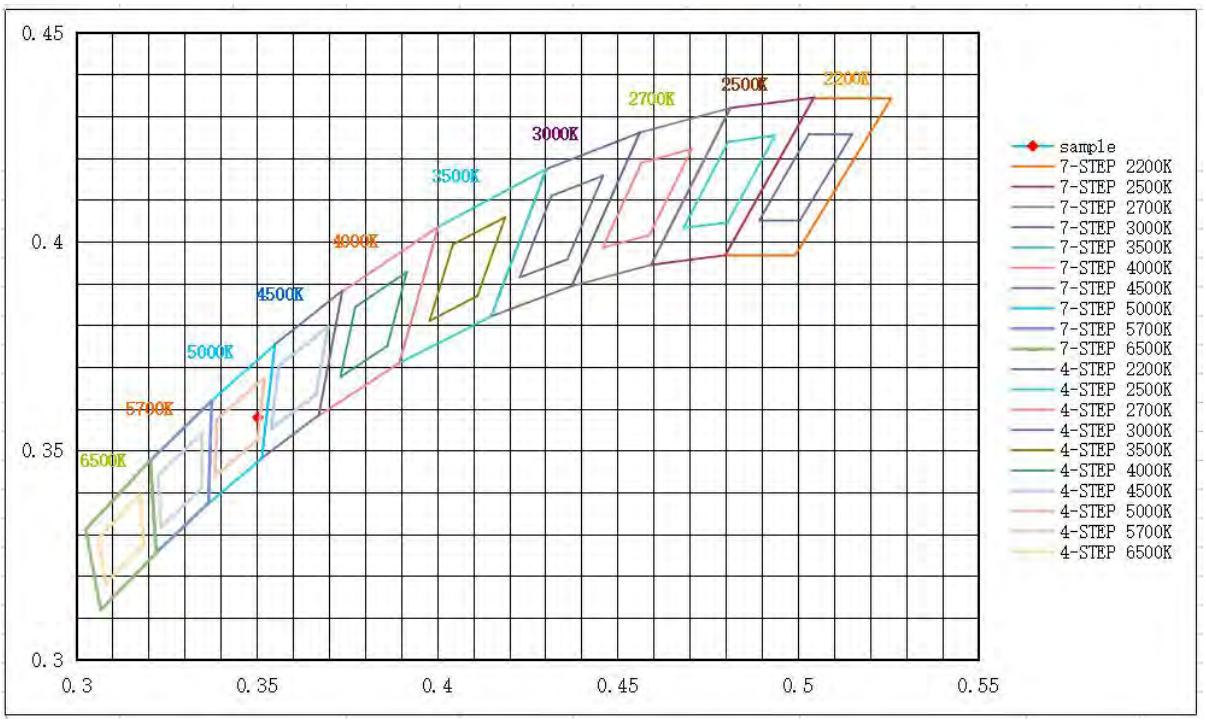
CRI	R9	Rf	Rg	Rcs,h1(%)
82.0	10	82	96	-12

Spectral Distribution



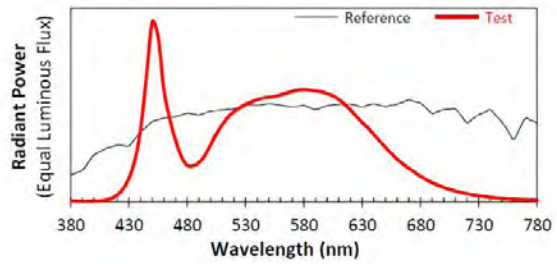


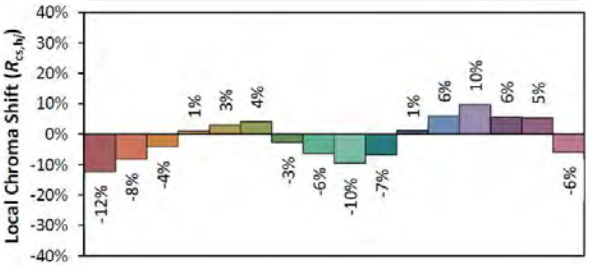
7/4 Step Quadrangle

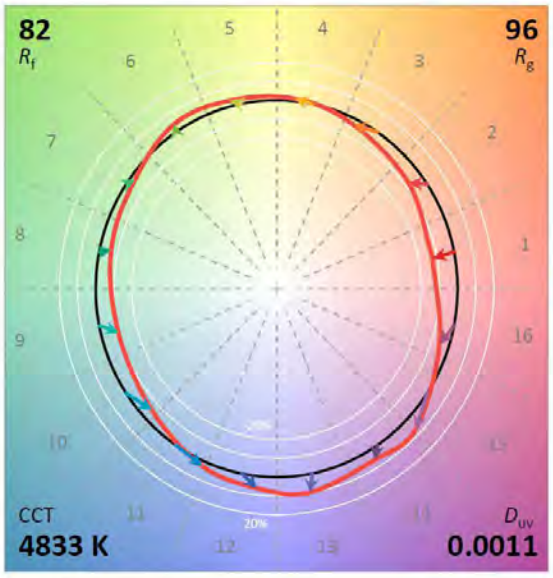


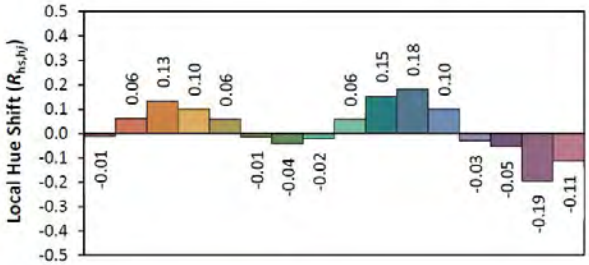
ANSI/IES TM-30-18 Color Rendition Report

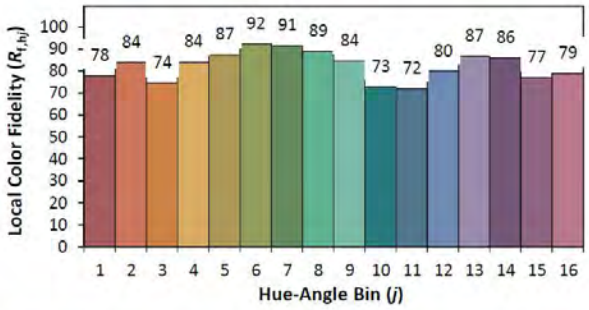
Source:	BL210817024-9	**Manufacturer:**	RAB Lighting Inc
Date:	2021-10-11	**Model:**	HIDFA-36S-XXX-8CCT-BYP/3SP, 5000K at 120V

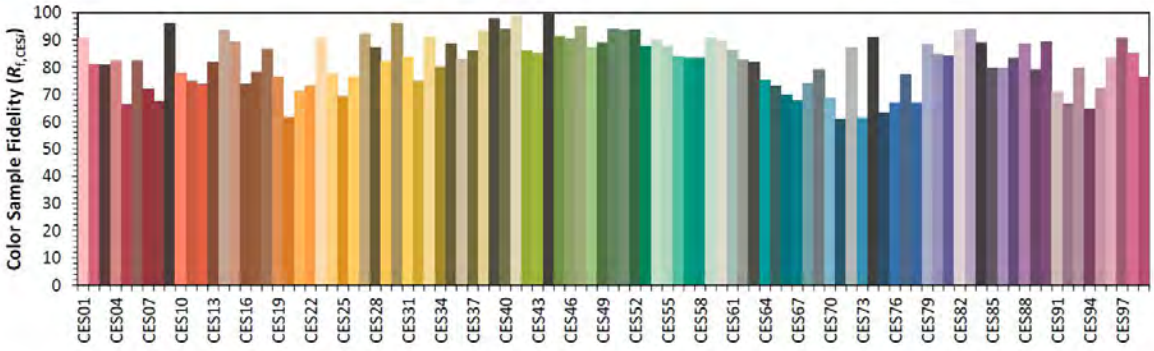












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.3503
y	0.3579
u'	0.2125
v'	0.4885

CIE 13.3-1995 (CRI)

R_a	82
R_9	10

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

3.1.4 Model Number: HIDFA-36S-XXX-8CCT-BYP/3SP, 3000K at 277V

Electrical data

Input Voltage(V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
277.05	60	0.148	36.82	0.899

Photometric data

Luminous Flux (lm)	Efficacy (lm/W)	CCT (K)
4805.02	130.5	3033

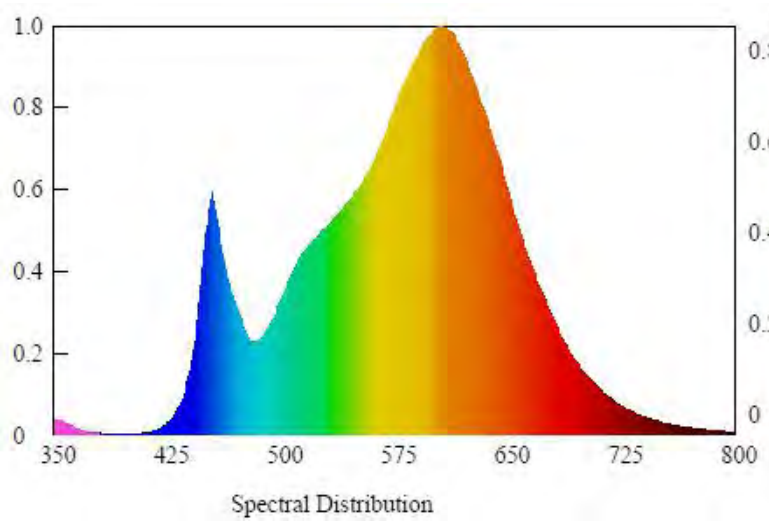
Chromaticity Coordinate

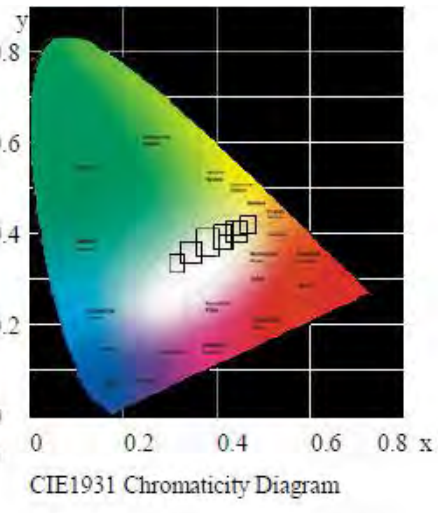
Duv	x	y	u'	v'
-0.00146	0.4325	0.3989	0.2499	0.5187

Color Rendering

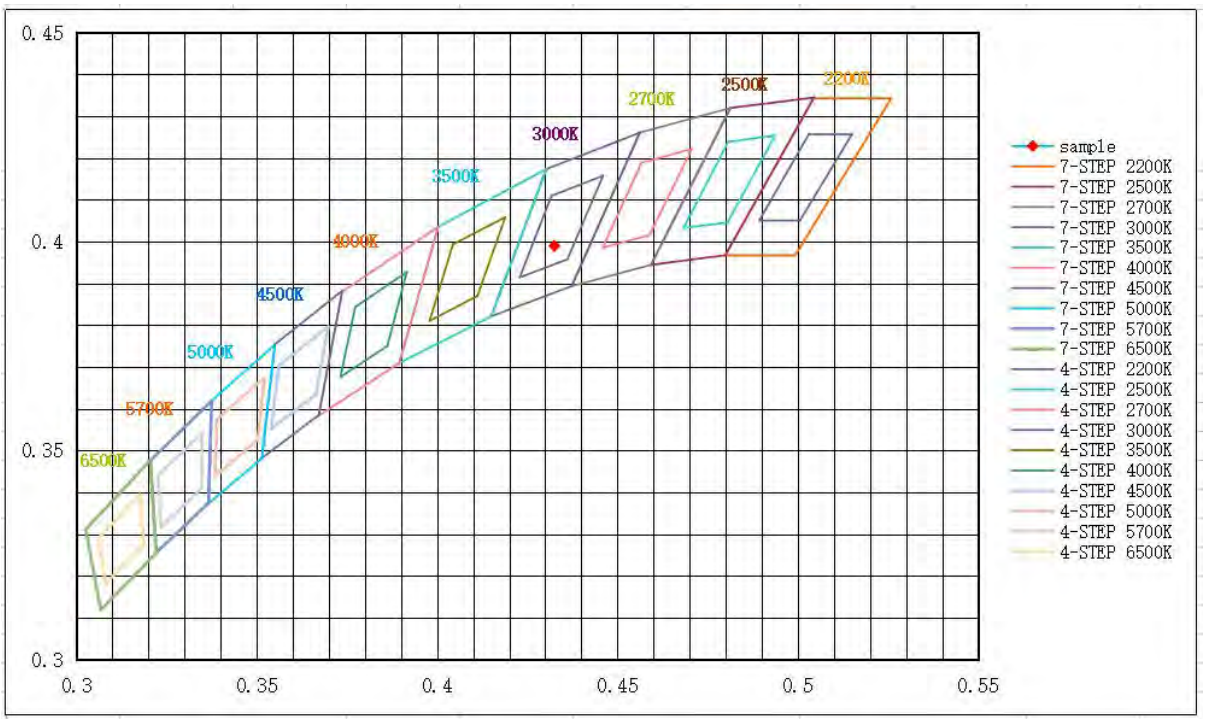
CRI	R9	Rf	Rg	Rcs,h1(%)
85.3	19	86	95	-10

Spectral Distribution



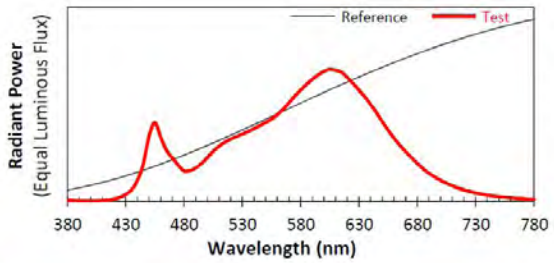


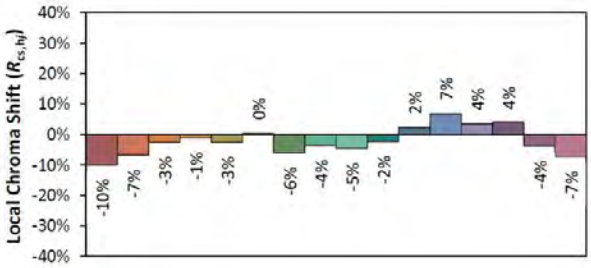
7/4 Step Quadrangle

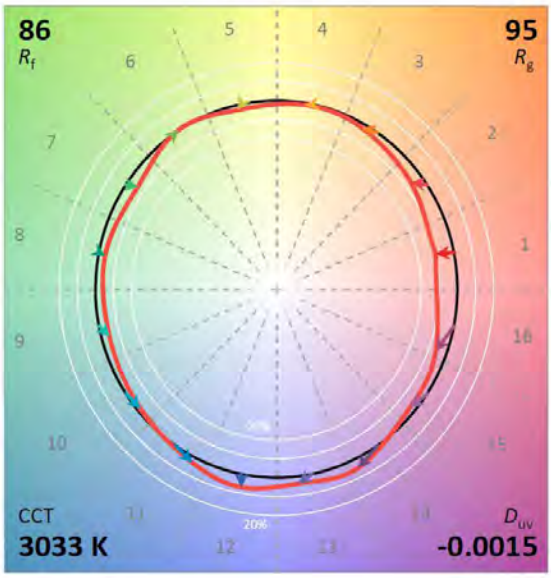


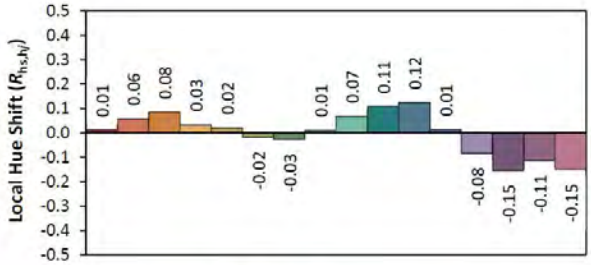
ANSI/IES TM-30-18 Color Rendition Report

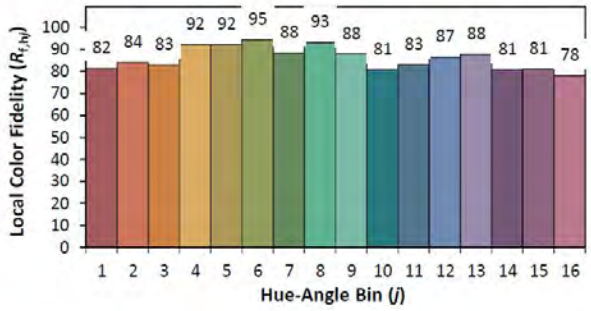
Source:	BL210817024-9	**Manufacturer:**	RAB Lighting Inc
Date:	2021-10-11	**Model:**	HIDFA-36S-XXX-8CCT-BYP/3SP, 3000K at 277V

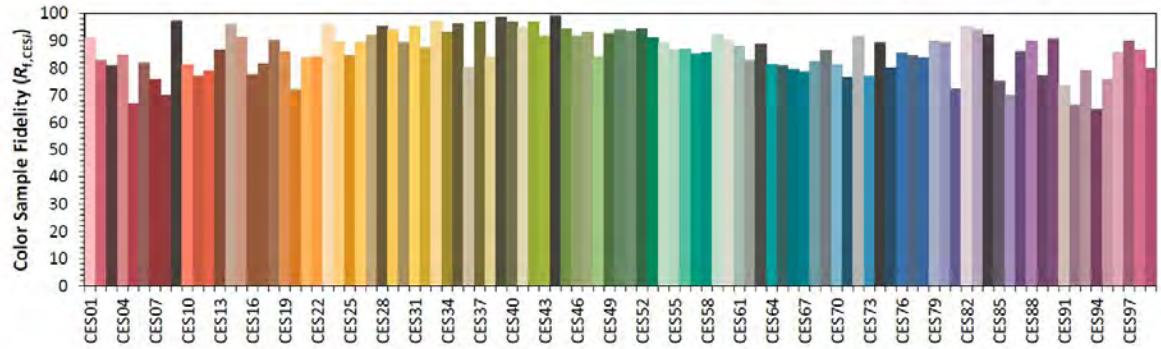












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.4325
y	0.3989
u'	0.2499
v'	0.5187

CIE 13.3-1995 (CRI)

R_a	85
R_9	19

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

3.1.5 Model Number: HIDFA-36S-XXX-8CCT-BYP/3SP, 4000K at 277V

Electrical data

Input Voltage(V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
277.05	60	0.145	36.00	0.897

Photometric data

Luminous Flux (lm)	Efficacy (lm/W)	CCT (K)
5220.11	145.0	3924

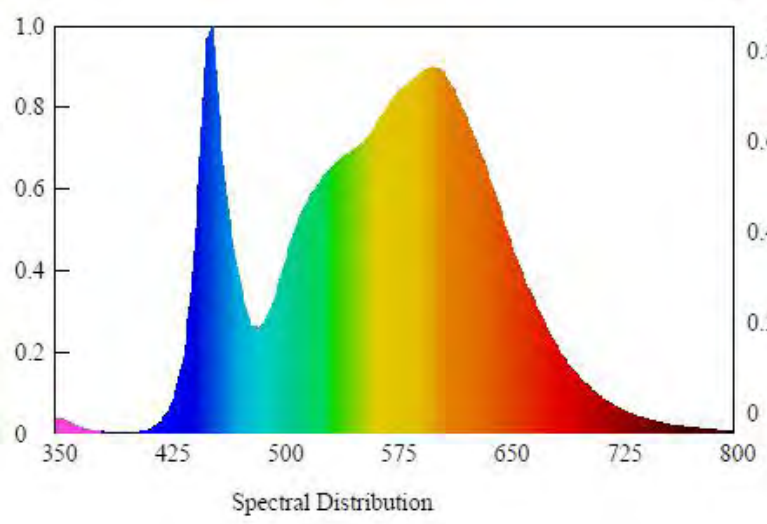
Chromaticity Coordinate

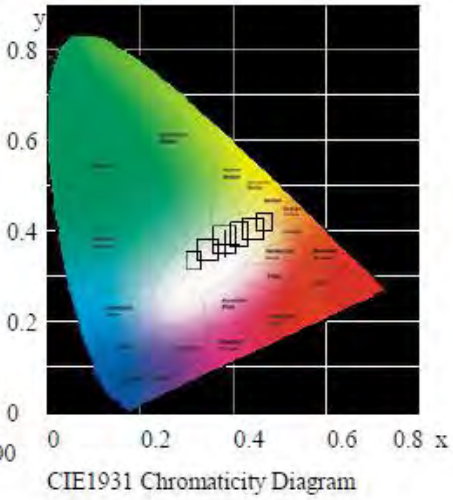
Duv	x	y	u'	v'
-0.00174	0.3826	0.3744	0.2275	0.5009

Color Rendering

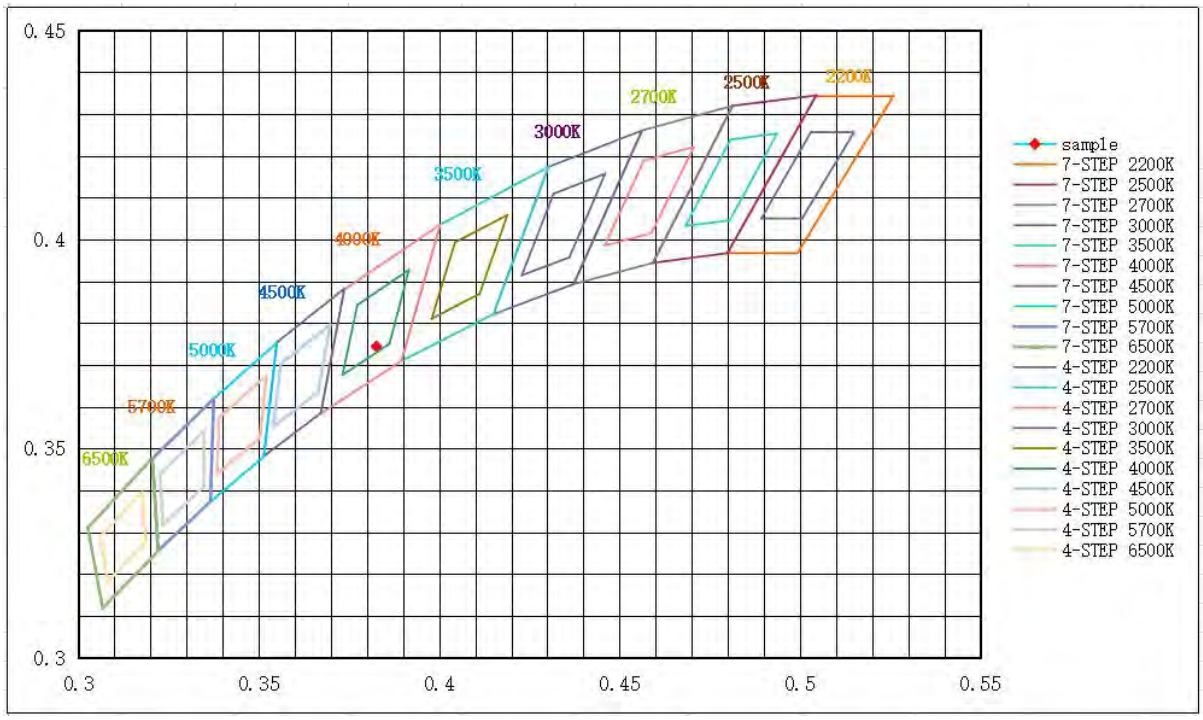
CRI	R9	Rf	Rg	Rcs,h1(%)
85.3	22	85	96	-10

Spectral Distribution



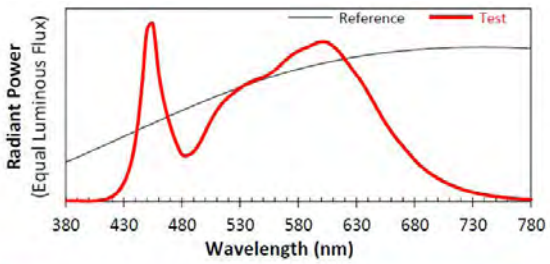


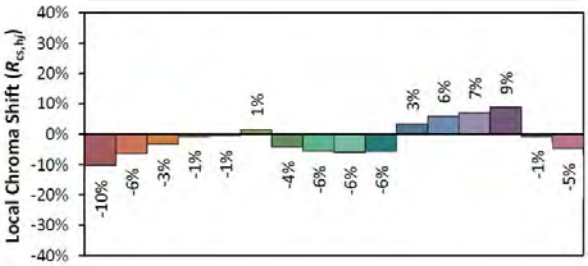
7/4 Step Quadrangle

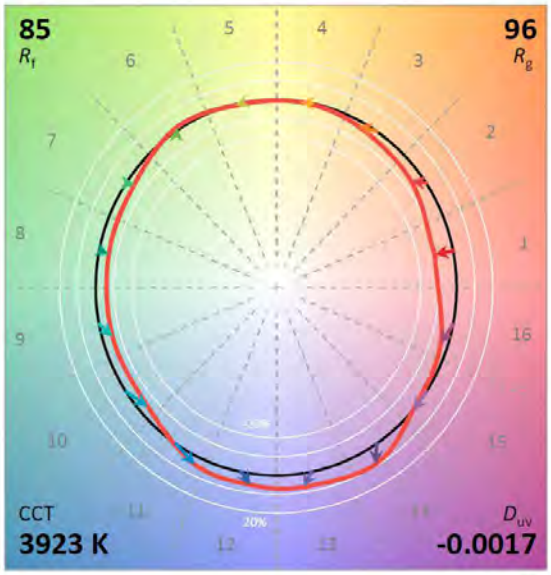


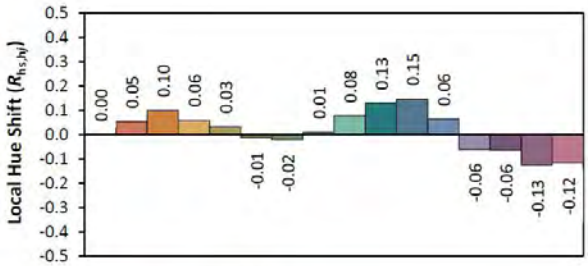
ANSI/IES TM-30-18 Color Rendition Report

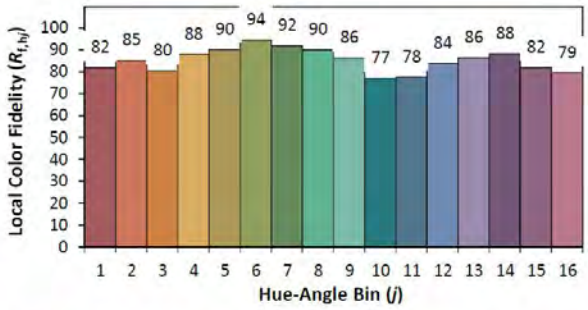
Source:	BL210817024-9	**Manufacturer:**	RAB Lighting Inc
Date:	2021-10-11	**Model:**	HIDFA-36S-XXX-8CCT-BYP/3SP, 4000K at 277V

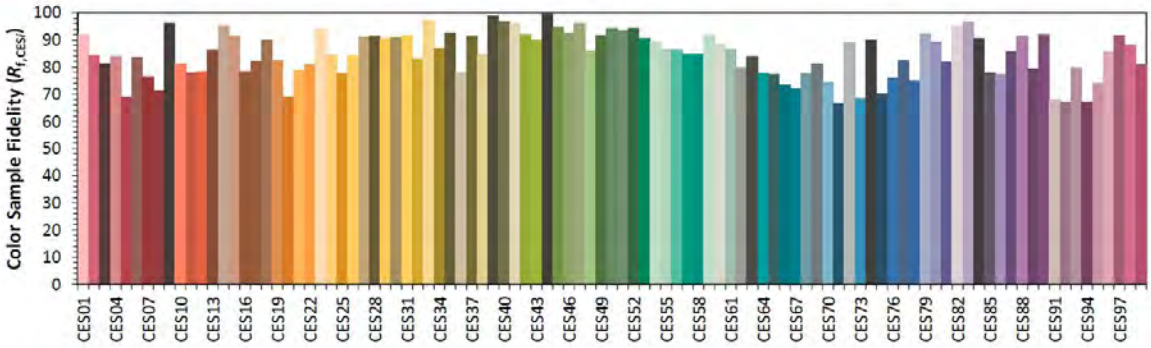












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.3826
y	0.3744
u'	0.2275
v'	0.5009

CIE 13.3-1995 (CRI)

R_a	85
R_9	21

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

3.1.6 Model Number: HIDFA-36S-XXX-8CCT-BYP/3SP, 5000K at 277V

Electrical data

Input Voltage(V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
277.05	60	0.147	36.73	0.899

Photometric data

Luminous Flux (lm)	Efficacy (lm/W)	CCT (K)
5171.53	140.8	4840

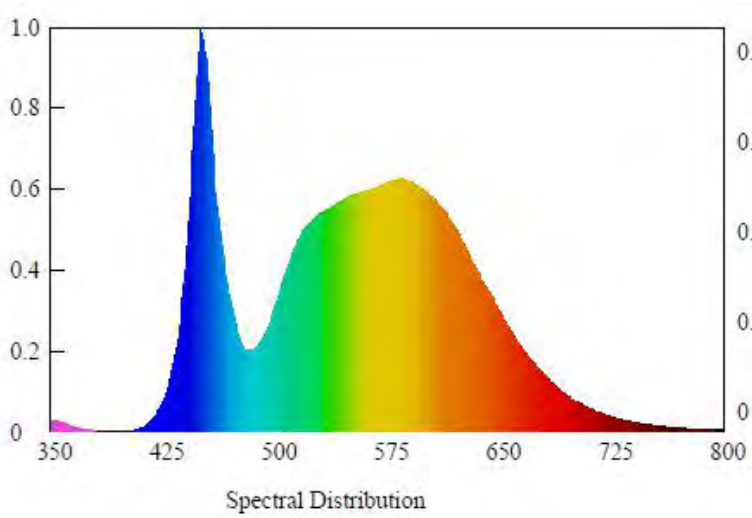
Chromaticity Coordinate

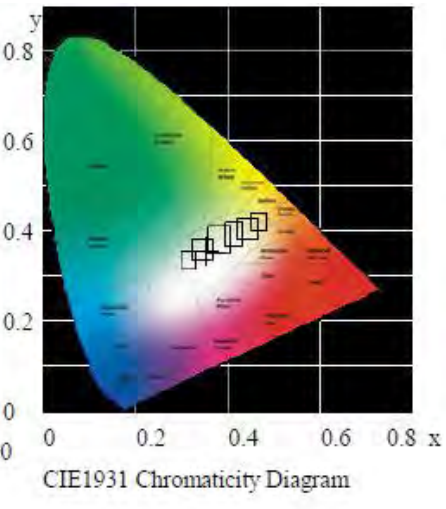
Duv	x	y	u'	v'
+0.00105	0.3500	0.3576	0.2124	0.4883

Color Rendering

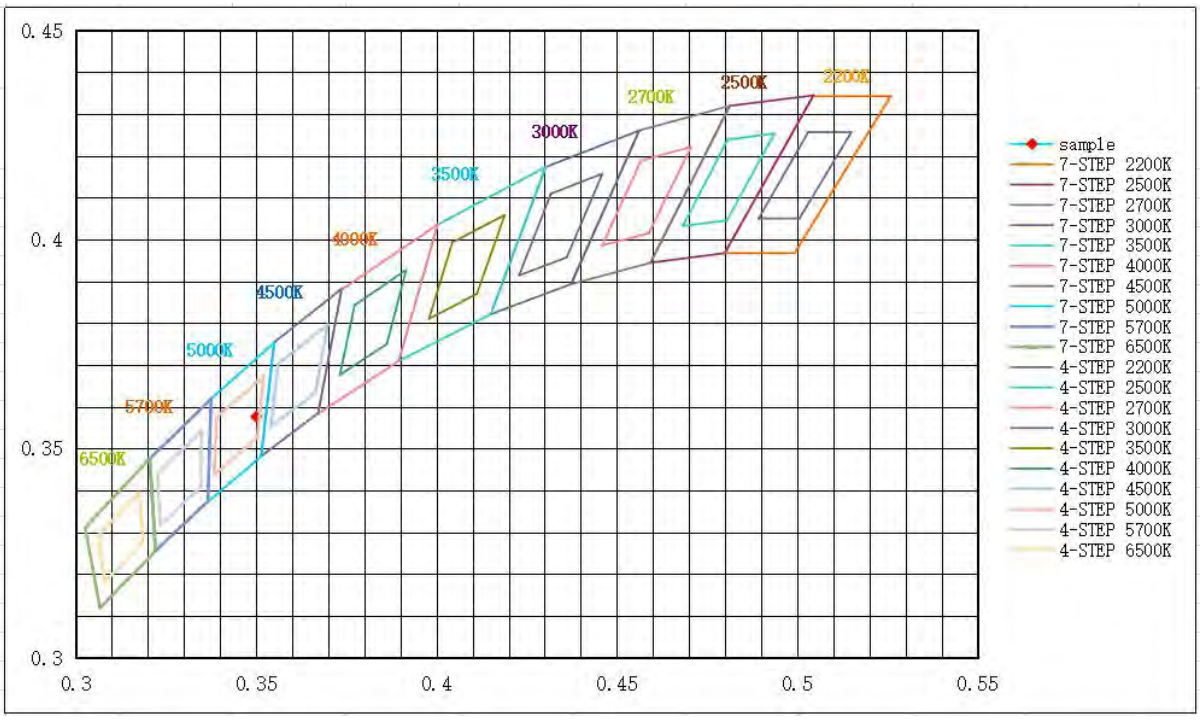
CRI	R9	Rf	Rg	Rcs,h1(%)
82.0	10	82	96	-12

Spectral Distribution



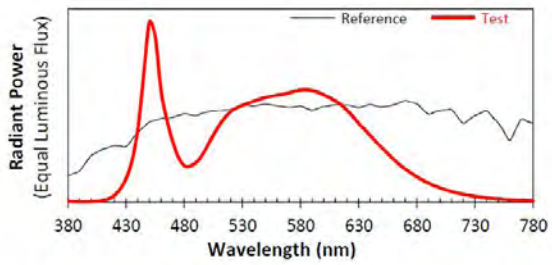


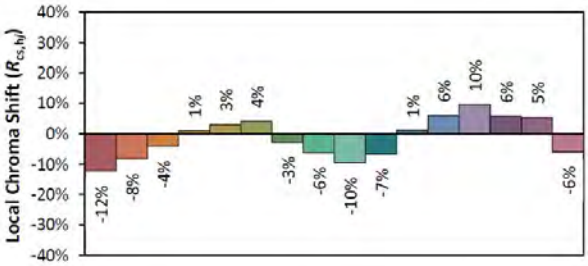
7/4 Step Quadrangle

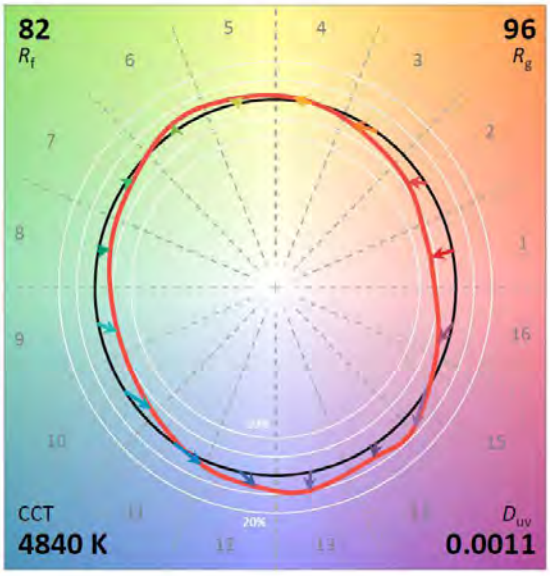


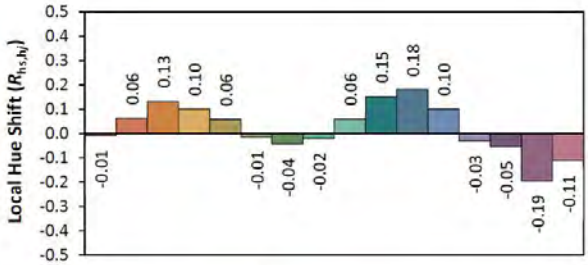
ANSI/IES TM-30-18 Color Rendition Report

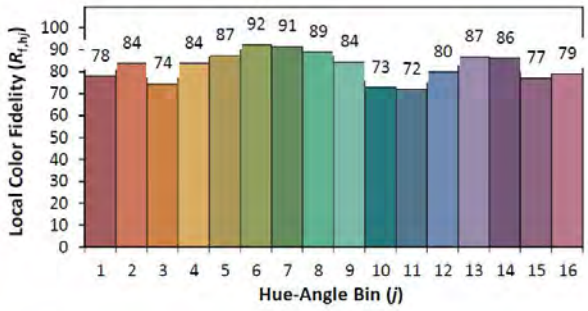
Source:	BL210817024-9	**Manufacturer:**	RAB Lighting Inc
Date:	2021-10-11	**Model:**	HIDFA-36S-XXX-8CCT-BYP/3SP, 5000K at 277V

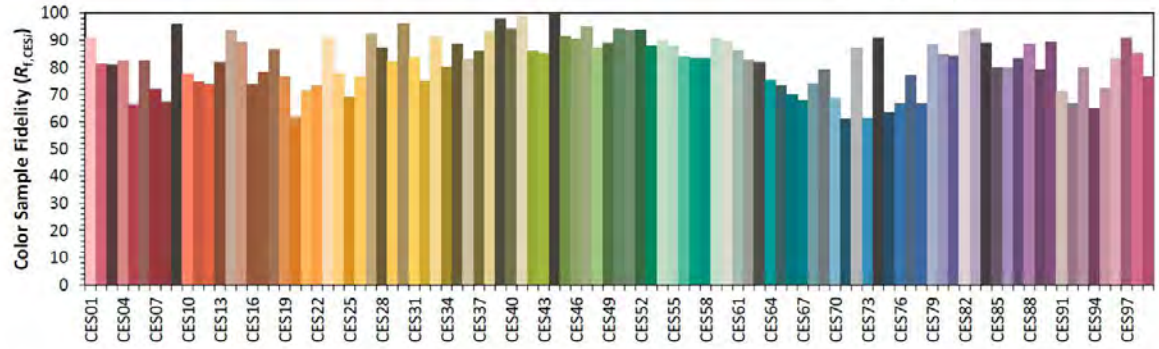












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.3500
y	0.3576
u'	0.2124
v'	0.4883

CIE 13.3-1995 (CRI)

R_a	82
R_9	10

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

3.2 Goniophotometer System (Total operating time for luminous intensity distribution: 1.0 hour)

3.2.1 Model Number: HIDFA-36S-XXX-8CCT-BYP/3SP, 3000K at 120V

Electrical data

Input Voltage(V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
120.150	60	0.302	35.829	0.988

Photometric data

Luminous Flux (lm)	Efficacy (lm/W)	Zonal Lumen in 0-60°(%lm)	Zonal Lumen in 0-90°(%lm)
4836.72	134.99	27.22	57.30

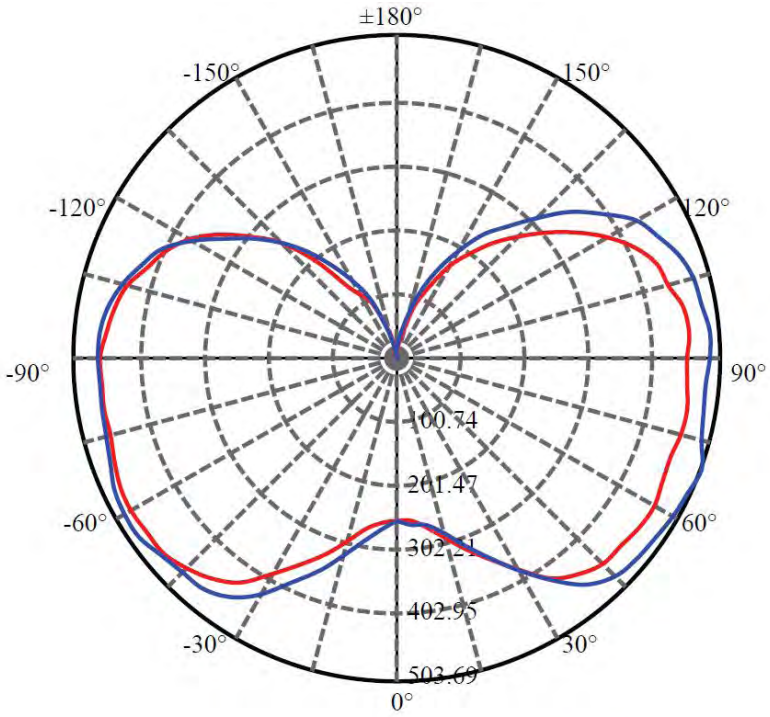
Zonal Flux Diagram

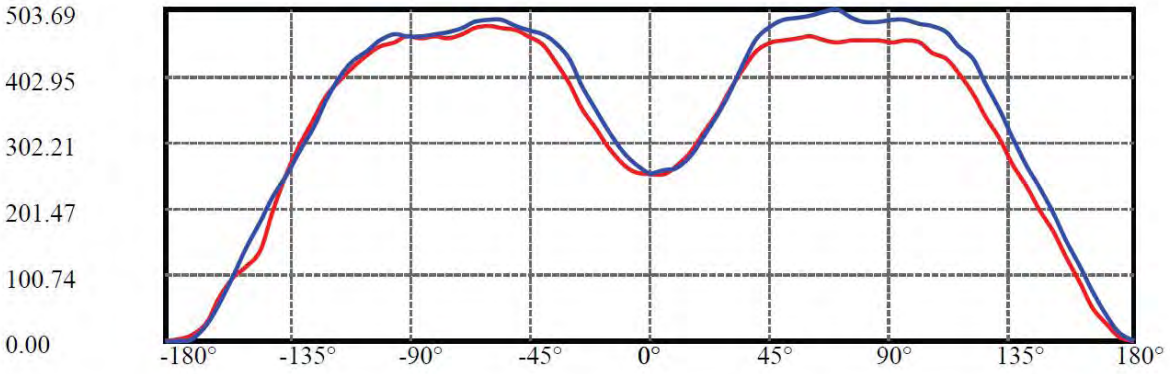
Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	254.569	0.000	0	0.00%	0.00%
5.0	257.352	6.120	6.12	0.00%	0.13%
10.0	269.784	18.857	24.977	0.00%	0.52%
15.0	293.272	33.400	58.377	0.00%	1.21%
20.0	322.912	50.782	109.16	0.00%	2.26%
25.0	355.294	71.131	180.291	0.00%	3.73%
30.0	392.398	94.621	274.912	0.00%	5.68%
35.0	425.796	120.485	395.397	0.00%	8.17%
40.0	448.126	145.807	541.204	0.00%	11.19%
45.0	459.606	168.074	709.278	0.00%	14.66%
50.0	464.806	186.791	896.069	0.00%	18.53%
55.0	469.233	203.091	1099.16	0.00%	22.73%
60.0	471.923	217.546	1316.706	0.00%	27.22%
65.0	471.189	229.272	1545.978	0.00%	31.96%
70.0	465.900	237.277	1783.255	0.00%	36.87%
75.0	460.739	242.208	2025.463	0.00%	41.88%
80.0	459.027	246.104	2271.567	0.00%	46.97%
85.0	457.946	249.164	2520.73	0.00%	52.12%
90.0	458.062	250.810	2771.541	0.00%	57.30%
95.0	456.492	250.412	3021.952	0.00%	62.48%
100.0	451.820	246.810	3268.762	0.00%	67.58%
105.0	439.542	238.503	3507.266	0.00%	72.51%
110.0	424.651	225.886	3733.152	0.00%	77.18%
115.0	403.621	209.724	3942.876	0.00%	81.52%
120.0	377.109	189.797	4132.673	0.00%	85.44%
125.0	342.526	166.342	4299.014	0.00%	88.88%
130.0	304.933	140.779	4439.793	0.00%	91.79%
135.0	267.043	115.576	4555.369	0.00%	94.18%
140.0	229.552	91.949	4647.318	0.00%	96.08%
145.0	191.135	70.188	4717.506	0.00%	97.54%
150.0	152.537	50.608	4768.114	0.00%	98.58%
155.0	115.034	33.861	4801.976	0.00%	99.28%
160.0	77.208	20.163	4822.138	0.00%	99.70%
165.0	43.836	9.976	4832.114	0.00%	99.90%
170.0	18.469	3.696	4835.81	0.00%	99.98%
175.0	5.045	0.841	4836.651	0.00%	100.00%
180.0	0.436	0.066	4836.717	0.00%	100.00%

Luminous Intensity Distribution Diagram

Light Distribution Curve [Unit:cd]





C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:162.3 Right:165.6

:C90/270Left:161.1 Right:168.3

Beam Angle(50%Imax):C0/180Left:136.5 Right:139.6

:C90/270Left:135.3 Right:142.3

Luminous Intensity Distribution Data

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	254.57	254.93	265.85	287.67	317.12	347.19	383.22	417.20	441.29
22.5	254.57	247.93	254.93	275.52	301.88	331.12	366.13	396.20	420.70
45.0	254.57	252.46	256.99	273.05	303.32	335.04	367.78	409.99	436.14
67.5	254.57	248.96	254.73	268.73	294.47	323.92	356.25	389.19	418.64
90.0	254.57	259.87	264.20	280.88	311.15	345.13	379.72	424.20	459.83
112.5	254.57	259.87	264.82	281.70	312.38	343.48	381.57	423.17	453.85
135.0	254.57	258.43	266.05	286.03	312.80	342.24	381.37	411.64	442.12
157.5	254.57	256.17	267.49	291.17	322.89	355.42	392.28	430.79	455.30
180.0	254.57	256.79	269.96	294.68	323.30	352.95	389.61	425.23	449.53
202.5	254.57	253.49	272.23	302.50	332.15	365.31	398.87	431.20	453.44
225.0	254.57	257.82	276.97	306.62	338.74	372.93	415.55	438.62	451.18
247.5	254.57	256.17	275.73	303.32	334.62	370.04	400.73	427.08	439.03
270.0	254.57	268.32	289.12	318.77	350.27	387.34	427.29	455.09	467.65
292.5	254.57	267.08	287.88	318.36	350.07	383.63	429.55	458.59	468.06
315.0	254.57	260.90	277.38	304.77	332.77	367.16	406.08	435.32	456.94
337.5	254.57	258.43	272.23	298.59	328.65	361.81	402.37	439.23	456.32
360.0	254.57	254.93	265.85	287.67	317.12	347.19	383.22	417.20	441.29

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	452.82	455.91	461.27	463.33	456.74	454.88	457.77	458.18	455.50
22.5	435.73	444.38	451.79	458.59	459.83	453.65	452.21	455.30	450.15
45.0	447.06	450.56	452.41	453.44	448.50	443.76	440.47	447.06	443.97
67.5	438.62	449.12	454.68	459.00	464.15	461.47	453.65	454.47	454.06
90.0	479.18	487.42	491.13	494.63	499.16	503.69	491.13	485.57	483.51
112.5	466.62	475.68	477.12	481.24	483.71	481.45	467.65	462.50	459.83
135.0	456.53	464.77	472.80	483.51	489.07	485.15	475.48	473.00	473.83
157.5	469.71	473.21	475.48	473.00	464.56	460.65	456.53	456.12	456.74
180.0	463.33	472.18	474.86	477.53	476.09	467.24	460.86	462.30	460.86
202.5	461.27	465.80	467.03	465.80	467.03	459.41	455.91	454.68	455.71
225.0	460.24	461.27	461.06	461.06	458.38	451.18	448.91	446.03	448.50
247.5	448.71	455.30	465.80	471.36	469.71	462.50	461.06	458.59	460.03
270.0	473.62	477.53	487.83	488.45	485.57	474.24	469.50	465.18	464.36
292.5	471.56	468.68	467.24	467.65	468.06	457.15	454.47	447.26	448.09
315.0	466.62	469.92	477.95	480.01	480.21	477.53	471.56	469.30	469.71
337.5	462.09	465.18	469.30	472.18	468.27	460.44	454.68	448.91	442.32
360.0	452.82	455.91	461.27	463.33	456.74	454.88	457.77	458.18	455.50

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	452.21	455.71	453.24	437.79	429.55	406.29	375.40	342.04	306.00
22.5	448.29	448.29	446.85	434.50	420.91	397.02	375.81	340.60	307.03
45.0	439.03	438.82	440.88	428.94	421.73	402.99	388.99	355.22	321.03
67.5	451.18	447.68	452.62	439.03	429.55	404.43	383.43	350.89	317.12
90.0	486.60	488.86	482.07	479.59	467.86	448.71	428.11	391.87	351.92
112.5	465.39	465.59	460.65	456.53	442.32	429.55	411.23	381.37	340.80
135.0	476.30	475.27	468.06	457.97	443.76	419.67	391.67	357.48	322.48
157.5	462.09	456.32	453.03	445.82	430.38	415.55	392.28	364.28	316.92
180.0	462.71	454.47	447.68	433.67	414.73	395.99	371.48	338.13	296.53
202.5	458.18	452.21	444.38	430.58	411.43	387.13	356.86	324.95	287.88
225.0	447.06	441.70	434.70	425.23	406.29	389.40	362.63	321.45	283.56
247.5	459.00	452.21	443.97	428.11	406.08	378.49	348.22	313.21	274.08
270.0	463.94	464.77	456.94	440.47	424.20	402.99	365.31	323.92	287.06
292.5	447.68	450.97	444.38	425.23	409.79	398.25	357.69	322.89	287.88
315.0	468.27	468.89	459.21	442.73	425.02	386.93	358.51	322.27	286.23
337.5	441.09	442.12	440.47	426.47	410.82	394.55	366.13	329.89	292.41
360.0	452.21	455.71	453.24	437.79	429.55	406.29	375.40	342.04	306.00

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	269.55	235.99	201.60	164.94	127.05	88.14	51.07	23.48	5.35
22.5	273.05	239.69	204.89	169.06	135.70	98.43	59.51	29.24	8.65
45.0	286.44	252.46	219.93	186.77	151.56	111.40	67.54	33.36	10.09
67.5	279.85	246.70	212.31	177.71	141.88	103.99	67.34	33.15	9.88
90.0	308.27	267.08	233.72	193.57	152.80	114.08	74.34	37.68	12.36
112.5	298.38	261.32	228.37	190.89	152.18	111.61	71.87	35.63	11.12
135.0	277.17	238.46	197.07	147.44	103.37	67.34	46.54	28.83	8.24
157.5	273.67	228.78	181.62	126.44	76.40	32.12	17.09	14.00	4.53
180.0	256.17	196.66	136.73	113.67	97.40	64.25	28.83	9.27	1.85
202.5	241.96	197.07	149.50	114.08	87.93	61.98	31.51	9.88	1.24
225.0	251.23	216.22	179.15	137.35	96.99	61.16	29.24	4.53	0.82
247.5	236.81	202.63	166.80	128.08	87.93	50.25	22.45	2.06	0.62
270.0	253.90	219.31	182.04	141.68	100.90	57.66	25.53	1.65	0.82
292.5	254.73	223.22	186.36	143.94	102.34	61.57	29.86	3.91	0.41
315.0	251.23	217.87	181.62	144.97	104.20	68.37	34.60	11.74	1.65
337.5	260.29	229.40	196.45	160.00	121.91	82.99	44.07	17.09	3.09
360.0	269.55	235.99	201.60	164.94	127.05	88.14	51.07	23.48	5.35

C/γ(°)	180.0
0.0	0.44
22.5	0.44
45.0	0.44
67.5	0.44
90.0	0.44
112.5	0.44
135.0	0.44
157.5	0.44
180.0	0.44
202.5	0.44
225.0	0.44
247.5	0.44
270.0	0.44
292.5	0.44
315.0	0.44
337.5	0.44
360.0	0.44

3.2.2 Model Number: HIDFA-36S-XXX-8CCT-BYP/3SP, 3000K at 277V

Electrical data

Input Voltage(V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
277.230	60	0.146	36.342	0.898

Photometric data

Luminous Flux (lm)	Efficacy (lm/W)	Zonal Lumen in 0-60°(%lm)	Zonal Lumen in 0-90°(%lm)
4721.71	129.92	27.14	57.23

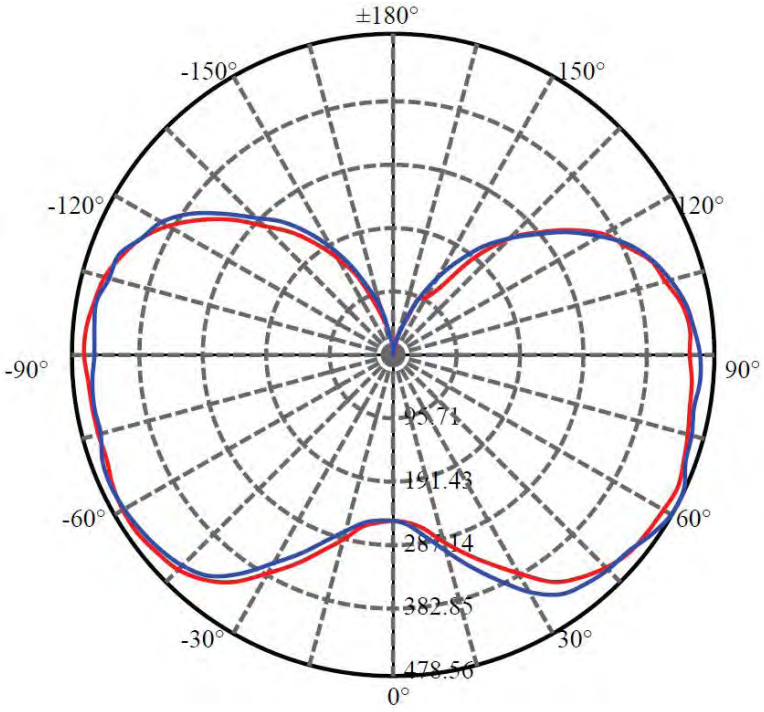
Zonal Flux Diagram

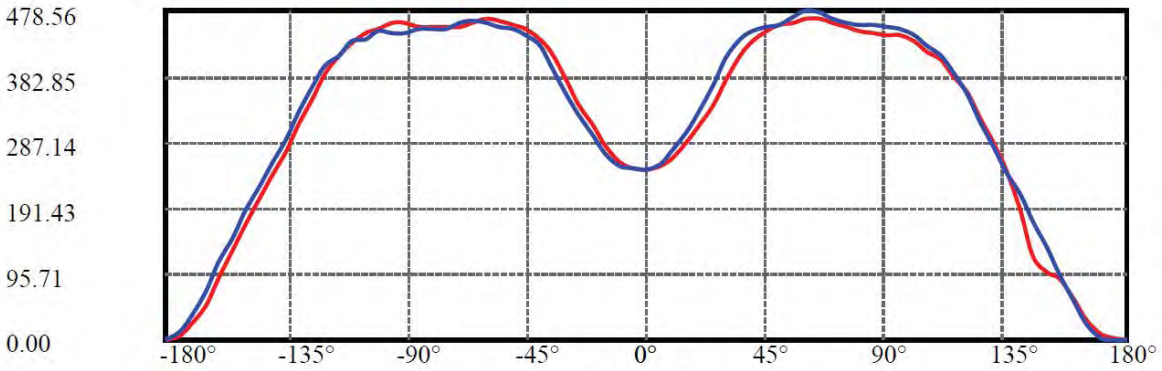
Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	247.325	0.000	0	0.00%	0.00%
5.0	250.041	5.946	5.946	0.00%	0.13%
10.0	262.641	18.340	24.286	0.00%	0.51%
15.0	286.014	32.546	56.832	0.00%	1.20%
20.0	314.264	49.471	106.303	0.00%	2.25%
25.0	345.293	69.175	175.479	0.00%	3.72%
30.0	381.175	91.935	267.414	0.00%	5.66%
35.0	413.776	117.062	384.476	0.00%	8.14%
40.0	435.423	141.682	526.158	0.00%	11.14%
45.0	447.328	163.449	689.607	0.00%	14.61%
50.0	452.978	181.920	871.527	0.00%	18.46%
55.0	457.405	197.948	1069.475	0.00%	22.65%
60.0	460.443	212.158	1281.633	0.00%	27.14%
65.0	460.108	223.788	1505.42	0.00%	31.88%
70.0	454.407	231.561	1736.981	0.00%	36.79%
75.0	449.966	236.389	1973.37	0.00%	41.79%
80.0	448.641	240.442	2213.812	0.00%	46.89%
85.0	447.238	243.432	2457.244	0.00%	52.04%
90.0	447.881	245.091	2702.335	0.00%	57.23%
95.0	446.993	245.024	2947.358	0.00%	62.42%
100.0	441.047	241.302	3188.66	0.00%	67.53%
105.0	429.233	232.863	3421.523	0.00%	72.46%
110.0	415.770	220.870	3642.393	0.00%	77.14%
115.0	394.625	205.197	3847.591	0.00%	81.49%
120.0	369.451	185.748	4033.339	0.00%	85.42%
125.0	335.628	162.977	4196.316	0.00%	88.87%
130.0	298.124	137.799	4334.115	0.00%	91.79%
135.0	261.483	113.077	4447.192	0.00%	94.19%
140.0	224.070	89.904	4537.096	0.00%	96.09%
145.0	186.682	68.531	4605.626	0.00%	97.54%
150.0	149.036	49.437	4655.063	0.00%	98.59%
155.0	111.661	32.992	4688.055	0.00%	99.29%
160.0	75.020	19.579	4707.634	0.00%	99.70%
165.0	42.407	9.678	4717.312	0.00%	99.91%
170.0	17.349	3.545	4720.856	0.00%	99.98%
175.0	4.826	0.793	4721.65	0.00%	100.00%
180.0	0.533	0.064	4721.714	0.00%	100.00%

Luminous Intensity Distribution Diagram

Light Distribution Curve [Unit:cd]





C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:165.8 Right:162.0

:C90/270Left:168.2 Right:161.3

Beam Angle(50%Imax):C0/180Left:140.6 Right:136.1

:C90/270Left:142.7 Right:135.8

Luminous Intensity Distribution Data

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	247.33	251.23	264.61	287.47	313.21	342.04	376.43	412.46	433.88
22.5	247.33	250.40	269.14	297.35	325.56	356.04	390.64	419.05	439.65
45.0	247.33	257.82	277.17	306.21	334.01	365.31	405.26	426.05	439.03
67.5	247.33	258.02	275.73	301.47	330.92	363.87	392.90	417.82	430.17
90.0	247.33	255.34	276.35	303.94	333.18	370.25	409.17	436.14	447.47
112.5	247.33	253.29	272.02	303.53	335.45	370.66	416.38	442.32	450.56
135.0	247.33	246.49	264.41	292.20	322.68	357.48	394.14	424.41	447.68
157.5	247.33	248.55	261.52	287.47	316.09	346.77	387.13	425.02	445.41
180.0	247.33	249.78	259.67	282.73	313.00	342.04	378.07	414.73	437.79
202.5	247.33	244.02	251.02	269.35	296.32	325.56	362.22	393.93	423.58
225.0	247.33	247.52	252.46	270.17	299.82	330.92	362.22	406.29	436.97
247.5	247.33	250.61	256.17	272.64	297.35	325.15	356.25	393.11	421.73
270.0	247.33	248.34	253.90	270.17	296.73	326.80	357.89	396.61	428.11
292.5	247.33	247.73	253.49	270.38	298.59	328.04	363.66	401.14	425.44
315.0	247.33	242.99	252.46	274.29	300.85	328.86	364.48	393.31	418.23
337.5	247.33	248.55	262.14	286.85	314.44	344.92	381.99	418.02	441.09
360.0	247.33	251.23	264.61	287.47	313.21	342.04	376.43	412.46	433.88

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	448.50	458.80	462.09	466.21	467.24	460.44	454.47	448.50	445.41
22.5	448.71	452.82	458.18	459.21	456.74	446.23	442.32	439.65	440.47
45.0	447.26	449.94	442.73	439.85	439.03	434.50	432.64	428.53	429.14
67.5	439.65	443.97	453.24	459.21	457.56	447.06	444.18	441.29	440.47
90.0	454.27	457.15	468.89	478.56	476.51	465.39	460.03	456.53	458.18
112.5	455.91	454.88	454.47	457.15	456.53	446.65	445.41	441.29	442.12
135.0	456.94	459.41	466.83	467.44	471.15	468.89	464.97	467.24	468.06
157.5	453.24	459.21	462.09	459.83	456.94	448.91	445.00	447.68	443.97
180.0	452.62	458.59	463.74	465.80	459.83	454.88	455.09	455.91	456.12
202.5	441.29	450.76	460.03	468.27	472.80	466.83	459.83	456.53	454.27
225.0	452.21	455.91	457.97	459.83	459.62	457.56	449.32	446.85	443.76
247.5	444.79	456.74	462.30	465.39	467.86	468.27	464.97	460.86	459.00
270.0	444.18	452.62	455.91	460.65	464.15	461.47	450.97	452.82	450.97
292.5	434.09	442.53	445.62	448.91	446.85	440.88	435.11	439.03	435.53
315.0	433.26	441.29	449.74	458.18	462.50	458.38	452.62	454.88	451.79
337.5	450.35	453.03	454.68	452.62	446.44	444.18	442.53	440.67	436.56
360.0	448.50	458.80	462.09	466.21	467.24	460.44	454.47	448.50	445.41

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	442.12	442.94	434.91	419.67	407.32	383.63	360.98	324.53	285.20
22.5	440.26	441.29	432.85	416.58	399.70	375.60	346.77	313.21	278.82
45.0	429.55	429.97	423.38	405.05	392.28	379.72	340.80	306.83	267.70
67.5	440.47	440.06	429.97	411.85	393.31	364.28	332.15	297.97	261.32
90.0	455.71	450.35	441.70	427.91	411.85	388.37	355.63	316.71	278.00
112.5	441.50	437.17	428.94	419.67	401.34	383.43	354.60	316.30	281.29
135.0	469.71	464.36	455.71	442.94	421.11	391.87	362.63	332.36	293.03
157.5	449.94	445.41	439.23	427.91	414.73	396.61	369.22	333.18	292.20
180.0	459.83	459.83	452.62	445.62	432.03	413.29	385.49	350.69	310.94
202.5	459.00	460.03	452.00	444.18	429.35	409.99	386.11	353.78	314.86
225.0	448.29	448.71	442.73	437.38	426.88	409.99	394.75	363.66	324.12
247.5	464.77	465.18	459.00	454.88	440.06	423.38	397.23	362.22	330.51
270.0	445.62	445.82	448.50	438.00	433.06	413.90	398.67	367.57	329.27
292.5	432.85	431.82	432.64	421.11	414.11	391.87	380.96	350.27	317.12
315.0	451.38	451.79	448.29	435.53	423.58	397.84	373.13	342.24	304.35
337.5	435.11	437.17	434.29	419.46	411.64	390.22	372.10	338.54	301.27
360.0	442.12	442.94	434.91	419.67	407.32	383.63	360.98	324.53	285.20

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	246.28	186.98	123.14	98.43	89.37	58.48	28.83	9.27	1.65
22.5	236.61	197.48	150.74	114.49	82.16	58.07	28.21	7.00	1.03
45.0	237.64	207.57	174.83	132.00	93.90	58.07	27.18	2.47	0.82
67.5	226.10	192.13	158.15	122.94	82.99	47.57	20.39	1.85	0.62
90.0	244.64	210.87	172.56	134.06	94.93	55.81	24.09	2.06	0.62
112.5	250.81	216.43	181.01	143.12	103.17	61.98	30.27	3.91	0.62
135.0	255.76	219.72	184.30	144.76	104.40	67.54	34.80	10.71	1.85
157.5	260.49	227.54	190.89	157.12	120.26	80.93	42.63	17.71	3.09
180.0	273.05	237.22	204.69	167.83	129.73	89.16	50.86	23.48	6.80
202.5	275.94	241.96	207.16	169.68	134.26	97.40	61.16	29.65	8.86
225.0	285.00	252.46	222.40	187.80	150.53	110.79	69.81	33.98	11.33
247.5	289.12	250.20	217.04	182.45	144.35	105.43	69.40	35.21	12.15
270.0	290.35	256.99	223.84	187.39	148.68	111.61	71.04	35.01	11.12
292.5	280.26	245.87	212.51	177.09	141.06	105.02	64.87	31.51	8.24
315.0	270.58	226.72	189.04	140.65	92.05	56.22	37.68	24.09	6.18
337.5	261.11	214.98	174.62	124.79	74.75	36.24	17.30	9.68	2.27
360.0	246.28	186.98	123.14	98.43	89.37	58.48	28.83	9.27	1.65

C/γ(°)	180.0
0.0	0.53
22.5	0.53
45.0	0.53
67.5	0.53
90.0	0.53
112.5	0.53
135.0	0.53
157.5	0.53
180.0	0.53
202.5	0.53
225.0	0.53
247.5	0.53
270.0	0.53
292.5	0.53
315.0	0.53
337.5	0.53
360.0	0.53

3.2.3 Model Number: HIDFA-36S-XXX-8CCT-BYP/3SP, 4000K at 120V

Electrical data

Input Voltage(V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
120.100	60	0.295	35.050	0.988

Photometric data

Luminous Flux (lm)	Efficacy (lm/W)	Zonal Lumen in 0-60°(%lm)	Zonal Lumen in 0-90°(%lm)
5188.87	148.04	26.04	56.01

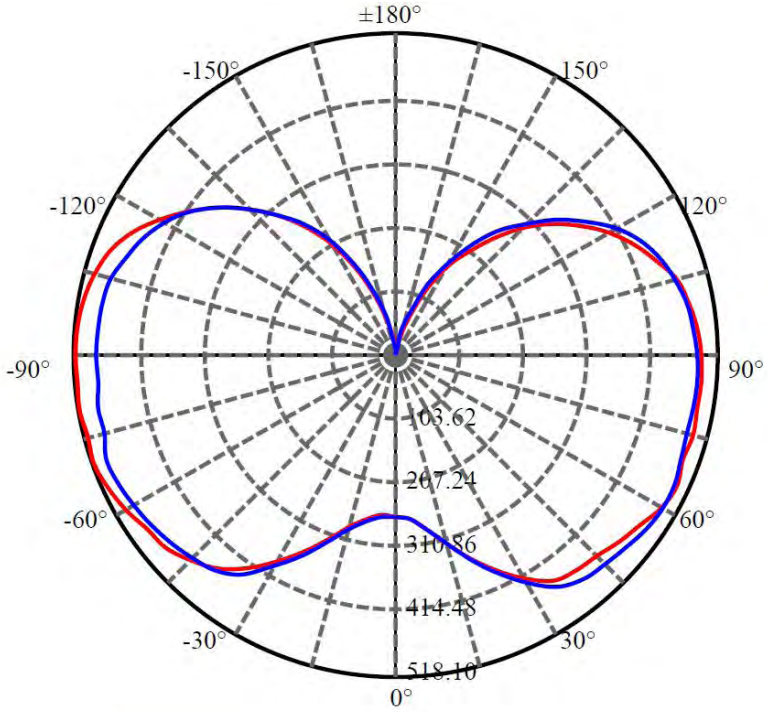
Zonal Flux Diagram

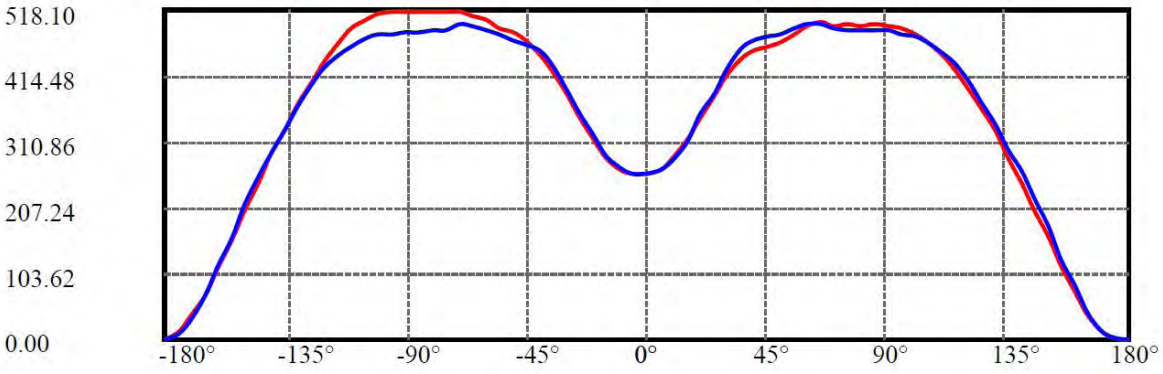
Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	259.643	0.000	0	0.00%	0.00%
5.0	262.873	6.247	6.247	0.00%	0.12%
10.0	276.245	19.286	25.532	0.00%	0.49%
15.0	300.621	34.219	59.752	0.00%	1.15%
20.0	332.848	52.207	111.959	0.00%	2.16%
25.0	368.022	73.508	185.467	0.00%	3.57%
30.0	403.479	97.634	283.101	0.00%	5.46%
35.0	435.539	123.551	406.652	0.00%	7.84%
40.0	456.569	148.841	555.494	0.00%	10.71%
45.0	467.277	171.058	726.551	0.00%	14.00%
50.0	475.269	190.455	917.006	0.00%	17.67%
55.0	483.596	208.489	1125.496	0.00%	21.69%
60.0	493.197	225.783	1351.279	0.00%	26.04%
65.0	498.822	241.162	1592.44	0.00%	30.69%
70.0	497.831	252.359	1844.799	0.00%	35.55%
75.0	494.909	259.486	2104.285	0.00%	40.55%
80.0	493.532	264.479	2368.765	0.00%	45.65%
85.0	492.091	267.817	2636.582	0.00%	50.81%
90.0	492.026	269.459	2906.041	0.00%	56.01%
95.0	488.834	268.567	3174.608	0.00%	61.18%
100.0	483.699	264.261	3438.869	0.00%	66.27%
105.0	474.240	256.318	3695.187	0.00%	71.21%
110.0	459.169	243.978	3939.164	0.00%	75.92%
115.0	440.159	227.716	4166.88	0.00%	80.30%
120.0	414.689	207.815	4374.695	0.00%	84.31%
125.0	383.788	184.566	4559.261	0.00%	87.87%
130.0	348.524	159.229	4718.49	0.00%	90.93%
135.0	310.724	133.211	4851.701	0.00%	93.50%
140.0	271.818	107.862	4959.563	0.00%	95.58%
145.0	230.453	83.800	5043.363	0.00%	97.20%
150.0	186.064	61.335	5104.698	0.00%	98.38%
155.0	138.779	41.109	5145.808	0.00%	99.17%
160.0	95.291	24.550	5170.357	0.00%	99.64%
165.0	55.895	12.460	5182.817	0.00%	99.88%
170.0	25.058	4.802	5187.619	0.00%	99.98%
175.0	7.310	1.158	5188.777	0.00%	100.00%
180.0	0.824	0.097	5188.874	0.00%	100.00%

Luminous Intensity Distribution Diagram

Light Distribution Curve [Unit:cd]





C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:168.0 Right:163.2

:C90/270Left:167.7 Right:164.2

Beam Angle(50%Imax):C0/180Left:143.9 Right:138.4

:C90/270Left:146.0 Right:141.9

Luminous Intensity Distribution Data

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	259.46	265.85	285.82	315.06	347.80	381.78	414.32	441.29	453.65
22.5	259.67	267.91	287.67	319.18	356.45	391.87	427.50	452.41	464.15
45.0	261.52	270.17	292.20	322.27	353.36	388.99	421.73	452.41	466.62
67.5	261.11	270.99	292.82	323.30	355.83	389.81	421.73	452.00	468.06
90.0	261.32	266.46	284.79	313.41	352.75	385.28	424.82	455.91	470.53
112.5	257.61	261.52	277.58	303.94	338.13	373.75	411.43	440.47	457.15
135.0	257.82	260.49	274.70	299.00	333.59	369.63	406.70	438.62	461.06
157.5	258.64	259.67	270.38	294.68	328.45	365.72	401.96	437.79	460.44
180.0	259.46	259.87	267.29	287.88	316.50	350.27	386.31	420.49	448.71
202.5	259.67	258.23	263.38	280.88	311.36	348.42	385.08	420.49	453.44
225.0	261.52	260.08	264.41	281.08	308.27	343.69	377.66	414.73	445.00
247.5	261.11	260.49	265.64	282.53	306.83	342.86	378.49	413.49	442.53
270.0	261.32	261.52	270.17	290.76	320.83	357.48	393.11	429.97	454.06
292.5	257.61	258.64	269.14	290.76	321.45	352.54	387.34	420.49	446.65
315.0	257.82	261.11	274.50	301.06	336.27	372.10	406.90	439.85	458.59
337.5	258.64	262.96	279.44	304.15	337.71	374.16	410.61	438.20	454.47
360.0	259.46	265.85	285.82	315.06	347.80	381.78	414.32	441.29	453.65

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	458.80	467.44	478.98	493.39	498.74	492.77	494.42	491.33	494.01
22.5	467.86	474.86	484.74	490.10	489.07	483.71	481.04	476.51	478.98
45.0	477.12	485.15	491.54	496.69	497.72	491.54	491.74	488.04	489.48
67.5	476.30	482.89	487.83	493.39	496.27	489.48	488.24	486.18	487.42
90.0	475.68	480.42	489.48	495.66	495.66	488.45	486.39	484.95	485.36
112.5	466.42	474.24	483.51	497.30	504.72	505.54	505.13	503.69	505.13
135.0	471.36	479.80	493.60	507.81	512.54	508.22	500.80	496.48	494.21
157.5	470.12	475.27	481.24	490.30	496.48	495.24	485.36	487.83	484.12
180.0	468.68	481.86	489.07	500.80	508.84	514.81	513.57	515.84	514.19
202.5	469.09	476.71	481.24	490.30	500.39	504.92	496.27	497.10	494.42
225.0	463.53	474.45	482.89	497.30	508.63	516.66	518.10	514.81	513.37
247.5	459.62	467.03	477.12	488.45	500.60	508.22	509.86	507.39	505.33
270.0	463.33	469.92	477.95	485.77	492.98	494.83	486.60	487.21	481.86
292.5	458.59	468.89	477.74	487.63	495.86	501.63	498.54	498.74	491.95
315.0	466.83	473.62	482.68	492.36	497.92	491.95	486.80	487.42	482.89
337.5	463.12	471.77	477.95	483.92	484.74	477.33	475.68	473.00	470.74
360.0	458.80	467.44	478.98	493.39	498.74	492.77	494.42	491.33	494.01

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	492.16	487.83	478.98	467.65	447.06	423.99	393.11	363.45	328.45
22.5	477.53	472.18	465.80	454.68	439.44	419.46	392.28	361.39	327.83
45.0	487.63	481.24	471.36	457.15	436.97	412.26	383.02	349.04	311.77
67.5	483.51	478.36	468.68	453.85	433.47	409.79	379.31	346.57	311.15
90.0	484.33	481.04	475.27	465.59	452.00	433.47	406.90	374.78	336.89
112.5	503.48	501.83	495.66	485.36	467.24	444.18	413.08	379.31	341.63
135.0	493.80	489.89	482.68	472.80	460.65	441.91	419.46	388.16	347.80
157.5	487.42	484.12	482.48	472.80	461.68	443.97	422.76	392.90	360.57
180.0	515.42	514.60	510.48	502.86	487.63	466.83	438.82	405.26	370.87
202.5	492.57	490.92	489.07	481.04	469.09	452.82	432.64	406.08	372.51
225.0	512.75	513.37	512.34	505.95	495.45	477.74	453.44	422.35	387.96
247.5	506.78	504.51	500.19	489.68	475.27	457.56	435.53	406.70	372.72
270.0	483.09	480.42	479.39	474.03	459.62	447.88	428.32	401.34	367.37
292.5	495.04	491.13	483.92	476.92	461.47	442.53	413.90	383.22	350.89
315.0	484.74	482.07	481.24	475.06	463.33	450.15	424.41	391.87	355.01
337.5	472.18	467.86	461.68	452.41	436.35	418.02	398.05	368.19	332.98
360.0	492.16	487.83	478.98	467.65	447.06	423.99	393.11	363.45	328.45

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	287.06	244.22	203.04	162.27	115.52	75.16	38.30	14.00	2.47
22.5	289.94	249.78	204.89	157.53	111.40	69.60	31.30	9.68	1.85
45.0	272.23	232.90	187.60	142.91	96.99	61.37	29.24	8.24	0.82
67.5	273.26	233.72	189.86	146.00	100.70	62.19	28.42	7.41	0.82
90.0	299.82	263.38	221.98	175.86	126.44	82.78	43.04	14.42	3.09
112.5	301.68	260.49	218.07	175.45	128.08	84.43	47.16	17.09	3.71
135.0	308.68	268.73	231.05	185.12	137.35	94.11	55.81	25.33	5.97
157.5	327.21	289.73	249.99	203.66	153.41	105.64	63.42	30.27	9.27
180.0	332.98	291.79	248.14	204.07	157.94	111.20	72.28	37.27	12.77
202.5	336.48	302.29	263.17	220.75	171.12	124.58	82.78	43.45	15.86
225.0	347.19	307.85	266.26	223.01	176.27	126.64	84.22	45.51	17.09
247.5	335.65	298.18	257.40	213.54	170.92	125.20	84.02	45.51	17.92
270.0	330.09	292.82	256.99	212.51	159.80	114.49	69.60	32.54	9.27
292.5	312.38	273.47	232.28	190.89	148.26	103.58	62.60	28.21	8.03
315.0	317.94	278.61	235.58	188.42	139.00	95.34	54.36	23.27	4.94
337.5	299.00	261.11	220.96	175.03	127.26	88.34	47.77	18.74	3.09
360.0	287.06	244.22	203.04	162.27	115.52	75.16	38.30	14.00	2.47

C/γ(°)	180.0
0.0	0.62
22.5	0.82
45.0	0.82
67.5	1.03
90.0	1.24
112.5	0.62
135.0	0.62
157.5	0.82
180.0	0.62
202.5	0.82
225.0	0.82
247.5	1.03
270.0	1.24
292.5	0.62
315.0	0.62
337.5	0.82
360.0	0.62

3.2.4 Model Number: HIDFA-36S-XXX-8CCT-BYP/3SP, 4000K at 277V

Electrical data

Input Voltage(V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
277.230	60	0.146	36.436	0.898

Photometric data

Luminous Flux (lm)	Efficacy (lm/W)	Zonal Lumen in 0-60°(%lm)	Zonal Lumen in 0-90°(%lm)
5265.17	144.50	25.49	55.40

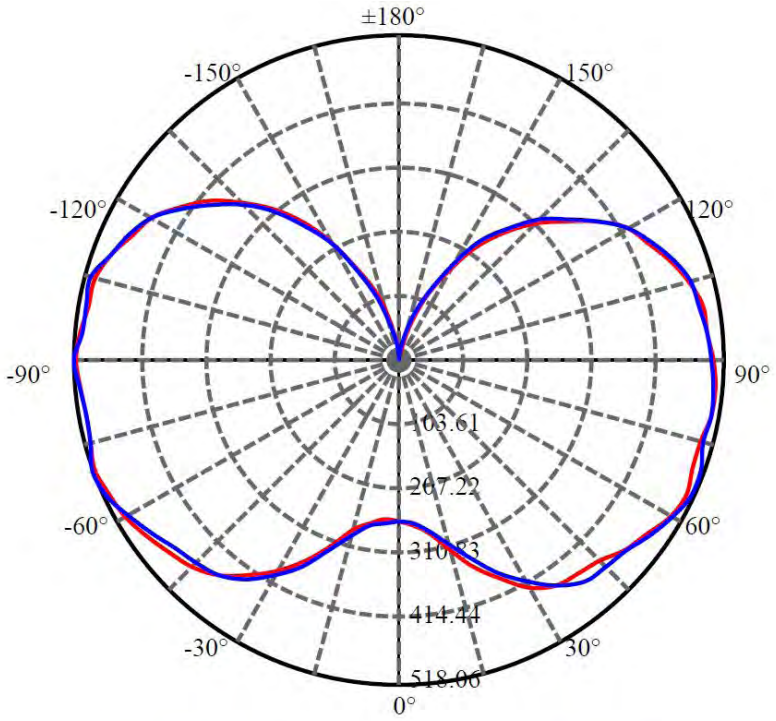
Zonal Flux Diagram

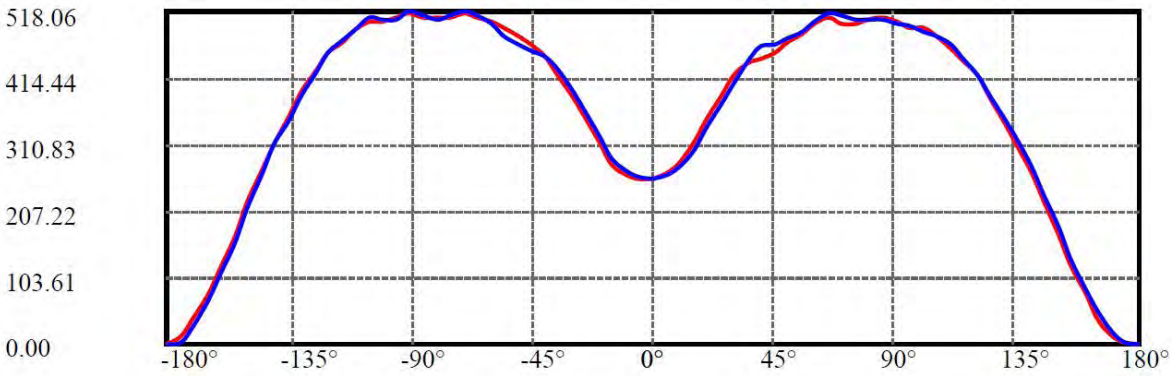
Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	256.715	0.000	0	0.00%	0.00%
5.0	261.275	6.192	6.192	0.00%	0.12%
10.0	275.480	19.201	25.394	0.00%	0.48%
15.0	299.304	34.096	59.49	0.00%	1.13%
20.0	333.338	52.139	111.628	0.00%	2.12%
25.0	370.566	73.827	185.455	0.00%	3.52%
30.0	403.917	98.011	283.466	0.00%	5.38%
35.0	432.931	123.232	406.698	0.00%	7.72%
40.0	451.275	147.523	554.221	0.00%	10.53%
45.0	459.961	168.723	722.944	0.00%	13.73%
50.0	468.503	187.610	910.554	0.00%	17.29%
55.0	480.093	206.256	1116.81	0.00%	21.21%
60.0	493.982	225.155	1341.964	0.00%	25.49%
65.0	502.721	242.300	1584.265	0.00%	30.09%
70.0	503.036	254.664	1838.929	0.00%	34.93%
75.0	500.789	262.384	2101.313	0.00%	39.91%
80.0	500.697	267.970	2369.283	0.00%	45.00%
85.0	502.695	272.646	2641.928	0.00%	50.18%
90.0	502.274	275.168	2917.097	0.00%	55.40%
95.0	495.073	273.082	3190.178	0.00%	60.59%
100.0	489.791	267.611	3457.789	0.00%	65.67%
105.0	485.441	260.945	3718.734	0.00%	70.63%
110.0	468.766	249.414	3968.148	0.00%	75.37%
115.0	447.675	232.049	4200.197	0.00%	79.77%
120.0	426.413	212.492	4412.689	0.00%	83.81%
125.0	397.044	190.340	4603.029	0.00%	87.42%
130.0	365.020	165.698	4768.727	0.00%	90.57%
135.0	328.739	140.184	4908.912	0.00%	93.23%
140.0	288.581	114.302	5023.214	0.00%	95.40%
145.0	244.941	89.014	5112.228	0.00%	97.10%
150.0	196.466	65.000	5177.228	0.00%	98.33%
155.0	144.363	43.132	5220.36	0.00%	99.15%
160.0	98.331	25.454	5245.814	0.00%	99.63%
165.0	59.251	12.987	5258.801	0.00%	99.88%
170.0	26.360	5.078	5263.88	0.00%	99.98%
175.0	7.096	1.197	5265.076	0.00%	100.00%
180.0	0.684	0.093	5265.169	0.00%	100.00%

Luminous Intensity Distribution Diagram

Light Distribution Curve [Unit:cd]





C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:168.5 Right:163.4

:C90/270Left:166.9 Right:164.8

Beam Angle(50%Imax):C0/180Left:146.3 Right:141.1

:C90/270Left:145.4 Right:142.0

Luminous Intensity Distribution Data

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	256.72	266.60	282.58	314.11	350.07	387.07	417.35	437.11	445.10
22.5	254.61	265.13	287.20	321.89	357.64	391.49	423.02	443.63	450.99
45.0	256.30	268.91	290.78	323.58	367.73	400.32	433.54	456.03	460.24
67.5	259.66	267.86	289.51	324.84	357.00	388.96	418.40	442.79	459.40
90.0	256.72	262.81	277.74	302.34	337.24	373.61	406.20	440.05	462.13
112.5	255.66	259.45	277.95	301.92	335.35	375.72	411.88	443.42	457.50
135.0	256.72	257.35	270.38	292.04	329.67	362.89	394.22	427.02	449.52
157.5	257.35	260.29	265.76	290.15	322.31	359.11	394.43	422.60	443.63
180.0	256.72	256.09	265.13	281.53	314.53	353.64	386.86	418.82	447.20
202.5	254.61	257.35	265.13	280.89	309.70	345.65	379.71	414.40	443.84
225.0	256.30	255.87	267.44	278.79	306.97	349.02	385.39	420.50	444.47
247.5	259.66	258.61	263.86	281.74	308.65	344.39	380.97	414.82	441.95
270.0	256.72	260.92	269.33	290.36	323.79	363.94	396.95	427.65	448.04
292.5	255.66	260.08	273.96	294.56	326.94	369.62	406.41	434.80	454.98
315.0	256.72	264.28	278.37	297.08	334.30	373.40	406.62	438.16	452.67
337.5	257.35	258.82	282.58	313.06	351.54	390.22	420.71	445.10	458.77
360.0	256.72	266.60	282.58	314.11	350.07	387.07	417.35	437.11	445.10

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	453.09	469.91	483.58	498.71	506.91	498.92	499.98	505.44	508.38
22.5	458.14	469.49	481.47	497.03	506.07	502.92	506.70	505.23	509.65
45.0	459.82	468.86	491.35	501.03	493.25	490.09	494.72	494.09	493.25
67.5	464.44	472.22	482.73	494.09	498.50	495.77	498.29	497.45	497.45
90.0	468.02	474.74	486.52	501.45	514.90	511.12	503.76	506.49	505.02
112.5	463.39	467.18	480.21	498.50	498.50	489.46	486.31	487.78	491.57
135.0	457.29	466.76	475.17	486.94	502.50	508.17	509.23	509.02	515.53
157.5	456.03	464.65	476.01	484.21	488.83	491.99	484.21	484.21	487.78
180.0	465.07	478.11	490.72	501.87	509.86	515.53	508.38	507.33	509.44
202.5	465.91	474.11	478.95	490.51	498.29	503.97	505.02	504.39	501.87
225.0	456.45	463.81	468.86	487.36	504.18	506.70	501.03	495.56	492.62
247.5	453.30	460.24	469.28	480.84	498.92	513.85	515.53	511.96	509.65
270.0	455.61	466.55	480.84	497.45	511.75	518.06	510.07	506.49	511.33
292.5	458.77	458.98	469.49	489.25	499.55	494.93	485.47	484.42	489.46
315.0	460.87	466.97	479.79	497.03	509.44	514.06	512.38	515.11	517.01
337.5	463.18	473.48	486.52	497.45	502.08	493.04	491.57	496.19	503.13
360.0	453.09	469.91	483.58	498.71	506.91	498.92	499.98	505.44	508.38

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	501.24	493.67	492.41	479.16	461.08	439.84	419.87	383.29	345.86
22.5	503.13	495.14	486.10	475.38	458.77	433.96	408.31	377.19	339.76
45.0	488.20	479.37	475.80	468.23	450.15	428.07	401.79	372.98	340.61
67.5	491.14	486.73	478.95	467.60	445.31	421.55	392.54	362.26	327.78
90.0	499.34	494.09	487.15	480.42	467.18	445.31	419.66	387.49	350.70
112.5	486.73	480.63	475.17	471.59	461.08	441.53	420.50	392.96	362.26
135.0	510.07	504.60	497.03	493.25	474.96	449.94	426.18	394.64	363.10
157.5	489.46	483.79	478.74	476.01	463.81	442.79	423.02	398.21	371.93
180.0	515.11	509.23	502.08	502.29	489.46	469.49	452.46	423.65	393.59
202.5	510.49	503.34	494.09	493.04	477.69	456.03	440.47	411.67	382.87
225.0	502.08	495.14	488.62	491.35	477.69	455.82	442.16	420.71	396.11
247.5	517.22	509.86	501.87	501.87	487.78	466.97	447.62	417.14	385.81
270.0	517.64	506.70	505.65	508.17	488.41	473.69	453.93	421.13	386.65
292.5	492.41	484.21	483.79	481.68	462.55	446.78	430.38	401.79	371.51
315.0	515.53	507.12	503.13	495.56	472.85	452.25	425.97	394.85	362.47
337.5	496.61	487.57	486.10	481.47	461.50	438.79	417.77	392.75	359.32
360.0	501.24	493.67	492.41	479.16	461.08	439.84	419.87	383.29	345.86

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	310.12	268.07	220.76	171.77	120.89	78.84	39.11	14.09	3.15
22.5	301.08	257.98	212.77	164.21	111.22	71.49	35.11	11.14	1.26
45.0	304.65	263.44	216.56	161.47	110.38	68.12	32.17	9.88	1.26
67.5	288.04	244.73	202.68	157.90	106.60	66.44	33.64	10.51	1.05
90.0	317.48	277.11	232.12	183.76	131.20	87.67	50.25	19.76	4.21
112.5	330.30	289.73	246.83	196.37	142.13	95.87	56.35	23.34	5.68
135.0	325.05	282.16	238.21	190.70	148.02	100.92	62.44	27.96	8.62
157.5	341.87	301.92	262.81	215.51	162.10	115.01	73.80	35.53	11.35
180.0	354.69	312.85	269.96	222.23	168.20	119.00	77.16	40.79	14.30
202.5	346.07	308.86	269.33	221.39	176.82	123.84	82.63	44.99	15.98
225.0	359.32	323.36	283.42	242.00	183.97	130.57	88.94	48.57	17.24
247.5	349.02	312.85	269.96	223.71	177.87	125.94	85.57	46.47	15.98
270.0	349.02	311.80	262.60	212.14	156.22	108.70	66.44	28.17	3.57
292.5	338.29	300.87	259.45	207.73	149.07	104.28	63.71	20.60	3.57
315.0	325.26	281.32	236.11	191.12	136.66	91.25	54.88	22.50	3.78
337.5	319.58	280.26	235.48	181.45	128.46	85.36	45.83	17.45	2.52
360.0	310.12	268.07	220.76	171.77	120.89	78.84	39.11	14.09	3.15

C/γ(°)	180.0
0.0	0.42
22.5	0.84
45.0	0.63
67.5	0.84
90.0	0.84
112.5	0.63
135.0	0.42
157.5	0.84
180.0	0.42
202.5	0.84
225.0	0.63
247.5	0.84
270.0	0.84
292.5	0.63
315.0	0.42
337.5	0.84
360.0	0.42

3.2.5 Model Number: HIDFA-36S-XXX-8CCT-BYP/3SP, 5000K at 120V

Electrical data

Input Voltage(V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
120.100	60	0.303	35.975	0.988

Photometric data

Luminous Flux (lm)	Efficacy (lm/W)	Zonal Lumen in 0-60°(%lm)	Zonal Lumen in 0-90°(%lm)
5186.07	144.16	25.45	55.37

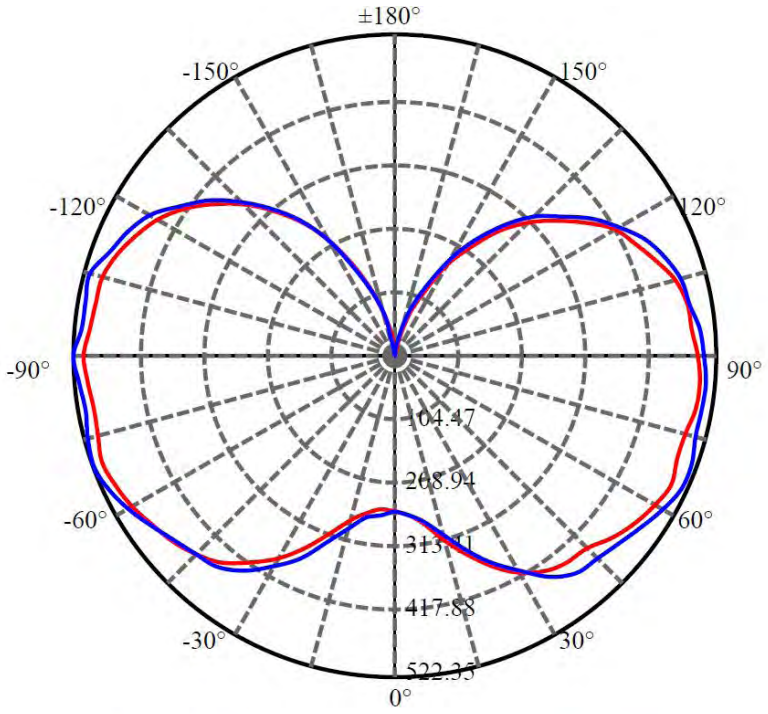
Zonal Flux Diagram

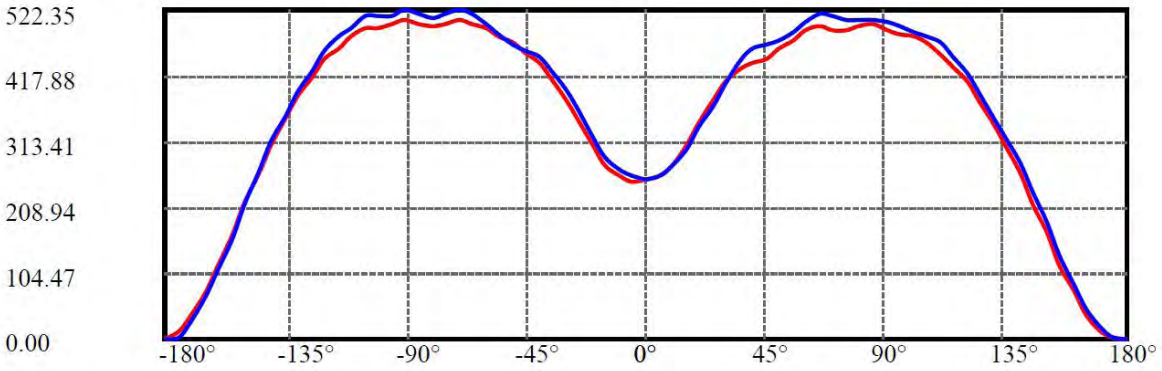
Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	251.937	0.000	0	0.00%	0.00%
5.0	256.404	6.077	6.077	0.00%	0.12%
10.0	270.277	18.841	24.918	0.00%	0.48%
15.0	293.837	33.463	58.381	0.00%	1.13%
20.0	327.122	51.176	109.557	0.00%	2.11%
25.0	363.790	72.464	182.021	0.00%	3.51%
30.0	397.037	96.283	278.304	0.00%	5.37%
35.0	425.600	121.139	399.443	0.00%	7.70%
40.0	443.927	145.074	544.517	0.00%	10.50%
45.0	452.248	165.934	710.451	0.00%	13.70%
50.0	461.221	184.580	895.03	0.00%	17.26%
55.0	472.579	203.039	1098.07	0.00%	21.17%
60.0	486.172	221.613	1319.682	0.00%	25.45%
65.0	494.838	238.485	1558.167	0.00%	30.05%
70.0	495.259	250.699	1808.866	0.00%	34.88%
75.0	493.727	258.505	2067.371	0.00%	39.86%
80.0	493.370	264.120	2331.491	0.00%	44.96%
85.0	495.195	268.617	2600.108	0.00%	50.14%
90.0	495.591	271.285	2871.393	0.00%	55.37%
95.0	487.754	269.247	3140.64	0.00%	60.56%
100.0	482.636	263.678	3404.318	0.00%	65.64%
105.0	478.552	257.187	3661.506	0.00%	70.60%
110.0	462.139	245.882	3907.387	0.00%	75.34%
115.0	441.489	228.805	4136.192	0.00%	79.76%
120.0	420.239	209.488	4345.68	0.00%	83.80%
125.0	391.651	187.666	4533.346	0.00%	87.41%
130.0	359.706	163.370	4696.716	0.00%	90.56%
135.0	324.008	138.154	4834.87	0.00%	93.23%
140.0	284.303	112.634	4947.504	0.00%	95.40%
145.0	241.510	87.728	5035.232	0.00%	97.09%
150.0	193.802	64.103	5099.335	0.00%	98.33%
155.0	142.330	42.538	5141.873	0.00%	99.15%
160.0	96.946	25.096	5166.968	0.00%	99.63%
165.0	58.390	12.802	5179.77	0.00%	99.88%
170.0	26.125	5.013	5184.783	0.00%	99.98%
175.0	7.147	1.190	5185.974	0.00%	100.00%
180.0	0.766	0.095	5186.068	0.00%	100.00%

Luminous Intensity Distribution Diagram

Light Distribution Curve [Unit:cd]





C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:168.5 Right:163.5

:C90/270Left:167.1 Right:164.7

Beam Angle(50%Imax):C0/180Left:146.1 Right:141.0

:C90/270Left:145.5 Right:141.9

Luminous Intensity Distribution Data

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	251.58	260.77	277.11	308.96	342.45	378.39	408.82	428.22	437.00
22.5	249.13	259.14	279.96	313.66	350.01	382.68	412.29	433.93	440.88
45.0	250.56	261.99	284.05	314.68	357.56	390.44	423.93	443.94	447.21
67.5	253.21	260.56	281.60	316.72	346.94	378.39	407.59	430.87	446.59
90.0	253.62	260.97	275.27	301.20	336.94	370.43	404.53	439.65	460.48
112.5	252.60	256.07	275.06	299.36	331.42	370.63	408.00	439.45	453.74
135.0	252.81	253.42	265.67	286.50	323.66	357.97	387.78	420.05	442.71
157.5	251.99	255.66	260.16	284.05	314.68	353.48	386.76	415.76	437.20
180.0	251.58	250.56	259.54	275.47	308.35	345.92	378.59	410.65	438.02
202.5	249.13	251.99	258.93	274.25	302.02	336.73	372.47	404.73	434.96
225.0	250.56	249.74	260.36	272.20	299.77	339.59	375.12	409.02	435.57
247.5	253.21	252.19	257.71	274.45	299.98	335.10	371.86	404.32	429.65
270.0	253.62	258.93	268.12	289.15	321.83	362.87	397.18	426.38	448.84
292.5	252.60	257.09	270.37	291.81	323.05	365.73	402.49	432.50	451.90
315.0	252.81	259.54	273.43	292.01	329.38	368.38	400.44	432.30	446.59
337.5	251.99	253.83	277.11	306.92	345.92	383.90	414.74	437.81	451.50
360.0	251.58	260.77	277.11	308.96	342.45	378.39	408.82	428.22	437.00

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	442.92	459.87	474.16	488.87	497.03	488.87	489.68	495.20	498.46
22.5	447.41	458.64	470.69	485.60	493.97	490.91	495.20	492.95	497.24
45.0	448.02	458.23	480.29	489.27	481.31	477.23	482.94	483.35	481.51
67.5	452.11	460.28	471.30	480.90	484.78	483.15	485.80	485.60	484.37
90.0	467.63	473.96	486.62	501.73	514.39	512.14	504.79	507.04	506.22
112.5	459.46	463.75	476.41	494.99	496.22	484.58	483.35	485.80	488.46
135.0	451.50	460.28	468.04	480.70	497.24	501.93	502.34	502.14	508.06
157.5	448.23	456.81	468.24	476.20	479.68	483.15	477.02	476.41	479.06
180.0	454.35	468.85	479.68	491.93	500.91	505.61	499.69	497.65	500.30
202.5	455.58	464.36	468.85	479.68	488.25	492.95	494.58	493.56	491.11
225.0	445.57	453.95	458.23	476.00	490.91	495.40	489.68	484.58	481.11
247.5	441.08	448.43	456.19	467.22	485.60	499.89	502.55	499.28	497.44
270.0	456.19	467.22	482.74	498.46	514.39	521.13	516.23	509.90	515.41
292.5	455.17	457.42	467.42	486.21	495.81	493.36	484.17	482.74	488.25
315.0	454.56	461.50	473.75	490.70	502.55	508.26	507.45	510.31	511.33
337.5	456.19	465.99	478.65	490.29	494.38	485.60	484.17	487.44	494.79
360.0	442.92	459.87	474.16	488.87	497.03	488.87	489.68	495.20	498.46

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	491.32	484.37	481.72	471.30	452.31	431.28	410.04	376.96	339.39
22.5	491.11	483.35	474.57	463.75	448.02	425.36	397.38	369.61	333.47
45.0	476.61	467.63	465.38	458.64	440.47	416.78	392.28	364.91	333.26
67.5	481.51	473.55	467.22	457.01	434.96	410.86	383.29	353.07	319.38
90.0	501.73	496.22	488.05	481.11	468.85	446.80	420.25	387.99	350.41
112.5	484.58	477.63	471.10	467.63	457.42	439.04	417.39	391.05	359.81
135.0	505.81	498.67	491.52	487.03	469.87	443.53	419.84	391.87	358.79
157.5	482.33	474.98	470.90	467.83	455.78	435.98	417.60	392.48	364.91
180.0	505.20	498.67	492.34	492.95	480.08	462.11	442.92	415.76	385.54
202.5	500.10	493.15	483.35	482.94	468.65	447.82	431.69	402.69	374.72
225.0	490.29	482.53	477.63	479.88	467.22	446.19	433.32	411.88	386.76
247.5	505.41	498.05	488.87	490.09	475.59	455.58	437.20	405.96	377.57
270.0	522.35	511.53	511.12	512.96	491.93	478.86	458.23	425.77	391.05
292.5	491.32	482.94	482.13	481.11	461.30	445.78	430.05	400.24	372.47
315.0	511.12	501.93	498.46	489.89	469.06	446.19	421.07	389.21	355.32
337.5	488.66	478.86	477.84	472.73	452.72	431.69	411.27	386.97	352.46
360.0	491.32	484.37	481.72	471.30	452.31	431.28	410.04	376.96	339.39

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	303.86	262.81	214.82	169.08	117.62	76.37	39.21	13.89	3.06
22.5	296.71	253.01	206.45	159.48	109.05	68.82	33.69	10.62	1.23
45.0	295.89	256.69	212.58	156.42	108.43	66.98	31.86	9.39	1.02
67.5	280.99	238.10	198.49	154.38	102.72	64.53	33.29	10.41	0.82
90.0	319.38	278.74	232.79	183.99	132.53	88.63	50.23	20.01	4.29
112.5	327.14	286.50	244.02	196.85	141.11	94.75	55.75	23.89	6.13
135.0	320.81	278.33	236.88	189.71	145.60	98.84	62.49	28.38	8.37
157.5	335.51	297.93	256.89	214.21	161.12	113.95	71.88	34.51	11.03
180.0	349.39	308.14	263.22	217.27	166.43	117.01	75.56	39.62	14.09
202.5	337.14	302.02	265.06	217.27	172.55	121.09	81.07	44.72	16.13
225.0	351.23	315.29	276.90	235.65	178.47	128.65	86.17	46.97	17.56
247.5	341.63	304.67	262.81	217.27	174.19	123.14	83.11	44.72	15.93
270.0	353.48	314.47	266.49	215.03	158.05	111.09	68.61	29.81	4.08
292.5	337.35	300.38	260.56	207.27	148.46	102.72	62.69	22.26	3.68
315.0	319.58	277.51	233.61	187.66	136.00	90.67	53.09	21.44	3.88
337.5	314.07	274.25	232.59	179.29	124.97	83.93	45.54	17.36	3.06
360.0	303.86	262.81	214.82	169.08	117.62	76.37	39.21	13.89	3.06

C/γ(°)	180.0
0.0	0.61
22.5	0.61
45.0	0.82
67.5	0.61
90.0	1.43
112.5	0.82
135.0	0.61
157.5	0.61
180.0	0.61
202.5	0.61
225.0	0.82
247.5	0.61
270.0	1.43
292.5	0.82
315.0	0.61
337.5	0.61
360.0	0.61

3.2.6 Model Number: HIDFA-36S-XXX-8CCT-BYP/3SP, 5000K at 277V

Electrical data

Input Voltage(V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
277.190	60	0.146	36.466	0.899

Photometric data

Luminous Flux (lm)	Efficacy (lm/W)	Zonal Lumen in 0-60°(%lm)	Zonal Lumen in 0-90°(%lm)
5143.15	141.04	25.49	55.41

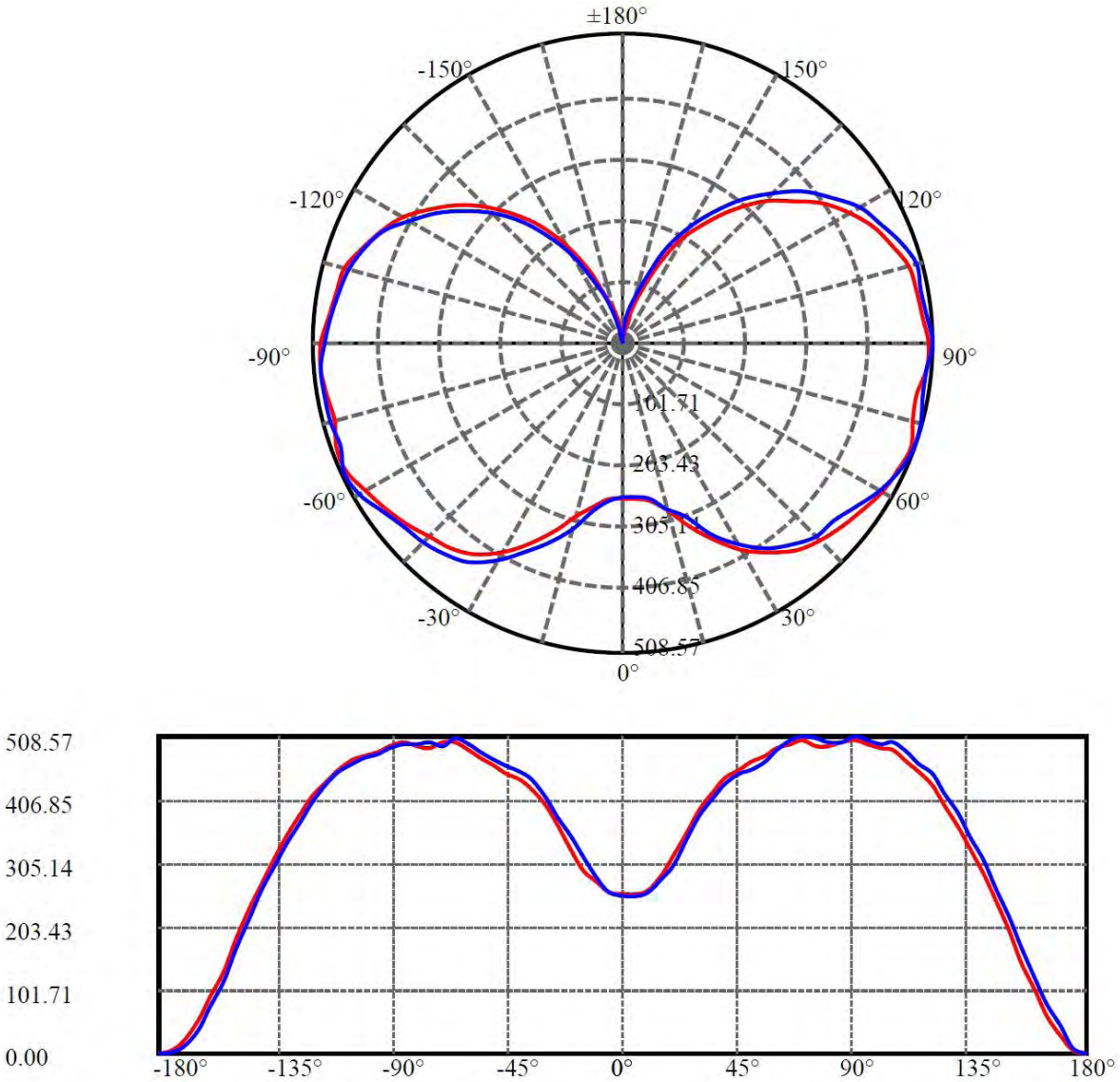
Zonal Flux Diagram

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	253.823	0.000	0	0.00%	0.00%
5.0	255.434	6.088	6.088	0.00%	0.12%
10.0	269.134	18.765	24.853	0.00%	0.48%
15.0	292.932	33.341	58.195	0.00%	1.13%
20.0	325.293	50.950	109.145	0.00%	2.12%
25.0	361.986	72.083	181.228	0.00%	3.52%
30.0	395.381	95.845	277.073	0.00%	5.39%
35.0	422.898	120.497	397.571	0.00%	7.73%
40.0	441.353	144.194	541.765	0.00%	10.53%
45.0	449.737	164.993	706.757	0.00%	13.74%
50.0	456.997	183.219	889.976	0.00%	17.30%
55.0	468.359	201.203	1091.179	0.00%	21.22%
60.0	482.418	219.769	1310.949	0.00%	25.49%
65.0	491.696	236.809	1547.757	0.00%	30.09%
70.0	492.080	249.098	1796.856	0.00%	34.94%
75.0	488.220	256.235	2053.09	0.00%	39.92%
80.0	488.284	261.285	2314.376	0.00%	45.00%
85.0	491.581	266.253	2580.628	0.00%	50.18%
90.0	491.645	269.215	2849.844	0.00%	55.41%
95.0	483.491	267.000	3116.843	0.00%	60.60%
100.0	477.804	261.207	3378.05	0.00%	65.68%
105.0	473.650	254.582	3632.633	0.00%	70.63%
110.0	457.981	243.513	3876.146	0.00%	75.37%
115.0	437.890	226.840	4102.986	0.00%	79.78%
120.0	416.239	207.640	4310.627	0.00%	83.81%
125.0	387.508	185.784	4496.411	0.00%	87.43%
130.0	356.516	161.776	4658.186	0.00%	90.57%
135.0	321.011	136.904	4795.091	0.00%	93.23%
140.0	281.685	111.594	4906.685	0.00%	95.40%
145.0	239.381	86.936	4993.621	0.00%	97.09%
150.0	192.451	63.590	5057.211	0.00%	98.33%
155.0	140.791	42.172	5099.383	0.00%	99.15%
160.0	96.328	24.869	5124.252	0.00%	99.63%
165.0	57.909	12.711	5136.963	0.00%	99.88%
170.0	26.073	4.982	5141.945	0.00%	99.98%
175.0	5.457	1.128	5143.073	0.00%	100.00%
180.0	0.690	0.073	5143.147	0.00%	100.00%

Luminous Intensity Distribution Diagram

Light Distribution Curve [Unit:cd]



C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:165.5 Right:166.7

:C90/270Left:163.3 Right:169.1

Beam Angle(50%Imax):C0/180Left:142.7 Right:144.3

:C90/270Left:140.8 Right:146.2

Luminous Intensity Distribution Data

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	254.59	255.82	262.77	286.70	319.41	357.45	392.42	419.82	442.72
22.5	252.75	255.41	263.79	282.61	311.85	345.59	382.19	412.05	437.81
45.0	253.57	251.11	260.32	285.26	311.03	349.27	386.28	419.61	442.11
67.5	252.34	251.32	262.16	280.77	311.85	344.16	374.01	408.57	426.57
90.0	252.95	252.14	258.88	280.15	303.67	346.20	382.40	409.59	431.88
112.5	251.73	253.77	263.38	281.58	312.46	352.95	387.92	416.75	440.06
135.0	257.45	255.20	262.57	286.49	321.25	354.18	387.71	413.48	437.61
157.5	255.20	256.43	267.06	295.28	330.05	368.70	402.03	430.25	450.29
180.0	254.59	257.45	273.81	295.08	326.57	366.04	398.35	422.07	440.47
202.5	252.75	256.84	276.88	299.78	333.11	371.15	402.64	426.98	438.22
225.0	253.57	254.39	279.54	299.58	336.18	375.04	406.73	434.34	449.47
247.5	252.34	256.02	272.38	301.83	332.71	367.67	400.39	428.20	449.47
270.0	252.95	259.91	280.56	314.92	347.84	379.53	411.23	439.45	451.92
292.5	251.73	260.11	281.99	309.60	349.68	382.60	416.55	439.25	449.67
315.0	257.45	256.64	271.36	295.49	332.91	365.02	399.16	423.50	435.16
337.5	255.20	254.39	268.70	291.81	324.12	366.24	396.10	422.48	438.22
360.0	254.59	255.82	262.77	286.70	319.41	357.45	392.42	419.82	442.72

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	456.22	467.67	478.51	489.96	497.12	503.45	494.05	491.59	499.37
22.5	451.31	458.26	462.76	471.55	483.62	496.71	488.94	483.01	491.80
45.0	445.99	448.24	456.42	475.85	490.78	496.30	483.82	477.69	481.17
67.5	433.31	438.22	447.83	465.42	478.10	496.09	493.23	487.50	495.07
90.0	447.42	453.97	467.26	485.66	501.00	507.14	506.93	500.18	499.37
112.5	453.35	462.15	468.28	483.21	491.80	493.03	488.12	482.80	484.85
135.0	452.33	460.51	469.51	481.37	493.23	501.61	499.98	497.93	501.21
157.5	457.04	464.60	472.78	486.28	495.48	495.28	486.48	485.87	493.23
180.0	447.83	461.53	472.78	486.07	500.18	498.75	488.32	493.43	498.34
202.5	443.33	448.86	461.53	477.89	489.14	488.53	487.50	491.39	492.00
225.0	448.86	454.17	475.44	493.23	489.96	478.51	479.73	484.23	482.80
247.5	458.26	462.15	472.78	483.41	492.62	488.53	488.53	494.25	489.96
270.0	461.53	469.31	482.39	497.32	504.68	492.00	497.93	495.28	495.89
292.5	450.70	456.22	472.58	485.66	481.78	469.10	472.78	478.92	479.73
315.0	443.33	451.51	461.94	476.46	490.57	488.32	486.07	492.41	496.71
337.5	444.97	454.58	470.94	479.33	487.10	479.94	469.10	476.05	483.82
360.0	456.22	467.67	478.51	489.96	497.12	503.45	494.05	491.59	499.37

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	502.02	494.46	490.78	485.87	468.90	452.33	430.66	399.16	363.38
22.5	495.89	486.28	481.37	476.05	459.69	441.29	418.18	391.19	367.26
45.0	488.94	480.35	477.48	479.12	458.47	443.74	429.84	403.66	374.83
67.5	498.14	489.14	486.89	480.96	464.19	448.65	422.27	392.42	364.81
90.0	508.57	502.02	495.68	499.57	484.85	465.42	449.06	415.93	386.49
112.5	487.50	482.39	474.01	476.46	465.22	443.95	427.18	402.85	376.67
135.0	501.00	493.84	487.30	482.19	464.19	442.52	420.23	389.96	360.72
157.5	490.37	481.98	475.03	474.42	462.35	441.49	419.21	394.46	361.95
180.0	494.05	483.62	477.69	471.96	456.22	435.77	414.30	384.65	350.29
202.5	488.53	482.19	472.37	465.01	448.86	425.95	402.23	371.15	336.59
225.0	479.53	471.35	465.01	460.51	448.24	429.63	407.14	380.15	346.00
247.5	486.48	479.73	471.35	465.01	447.83	424.93	398.55	368.49	332.50
270.0	489.55	480.76	473.80	464.60	451.72	433.31	404.07	372.17	338.23
292.5	475.85	468.28	463.37	459.49	444.36	420.64	399.98	371.97	346.41
315.0	495.07	484.23	481.98	469.31	448.24	425.75	404.07	374.01	339.66
337.5	484.85	475.24	470.74	467.87	454.38	430.86	412.87	387.92	358.47
360.0	502.02	494.46	490.78	485.87	468.90	452.33	430.66	399.16	363.38

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	328.41	287.51	245.80	196.52	146.42	101.02	61.14	29.45	6.34
22.5	327.80	294.47	250.91	204.90	153.78	107.97	67.07	31.70	9.00
45.0	341.70	304.49	267.06	217.78	158.89	113.29	71.98	31.90	7.36
67.5	330.87	291.81	248.66	205.10	155.82	107.15	67.07	31.70	4.50
90.0	348.45	309.80	265.84	219.21	170.34	119.63	78.52	44.58	9.82
112.5	343.13	305.30	267.06	223.51	166.46	117.79	77.50	39.47	6.75
135.0	322.07	283.83	239.25	198.36	152.55	103.47	66.46	31.90	7.16
157.5	328.21	289.76	248.25	198.36	143.14	98.16	59.51	26.58	8.18
180.0	314.92	273.20	232.71	183.63	133.33	91.20	53.37	22.90	5.93
202.5	300.81	259.50	213.49	170.14	122.90	82.21	46.62	18.40	4.91
225.0	314.30	273.20	229.23	177.09	124.94	82.61	44.78	16.56	2.66
247.5	295.69	254.80	209.81	168.70	119.22	77.71	43.56	16.77	3.48
270.0	302.03	261.34	218.60	167.27	115.74	75.87	37.42	13.50	1.84
292.5	308.58	267.68	226.78	174.02	120.85	79.14	42.53	16.16	1.84
315.0	304.69	262.57	217.99	175.86	125.97	86.30	49.69	20.45	2.45
337.5	324.53	287.72	248.66	198.76	142.33	97.75	59.30	25.15	5.11
360.0	328.41	287.51	245.80	196.52	146.42	101.02	61.14	29.45	6.34

C/γ(°)	180.0
0.0	0.61
22.5	0.61
45.0	0.61
67.5	0.61
90.0	1.23
112.5	0.61
135.0	0.61
157.5	0.61
180.0	0.61
202.5	0.61
225.0	0.61
247.5	0.61
270.0	1.23
292.5	0.61
315.0	0.61
337.5	0.61
360.0	0.61

4 Additional Test

Model Number	Test Voltage (V)	Frequency(Hz)	Power Factor	THD
HIDFA-36S-XXX-8CCT-BYP/3SP	120	60	0.988	16.2%
	277	60	0.913	18.4%

Photo Document

****End of test report****