

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL87578-GONIOPHOTOMETRY

PAGE: 1 OF 9

ISSUE DATE: 06/15/16

PREPARED FOR: RAB LIGHTING INC.

CATALOG NUMBER: FSLEDH3NS/120 - FSLEDH3NS/120/TL

LUMINAIRE: CAST SILVER PAINTED METAL HOUSING/FACEPLATE, CAST SILVER PAINTED METAL CIRCUIT BOARD MOUNTING BASE WITH UNFINISHED CIRCUIT BOARD MOUNTING SURFACE, 1 WHITE CIRCUIT BOARD WITH 3 LEDS, CLEAR FLAT GLASS LENS.

LAMPS: THREE WHITE MULTI-CHIP LIGHT EMITTING DIODES (LEDs), VERTICAL BASE-UP POSITION.

INPUT ELECTRICAL: 120.0 VOLTS, 3.07 WATTS, 0.0270 AMPS

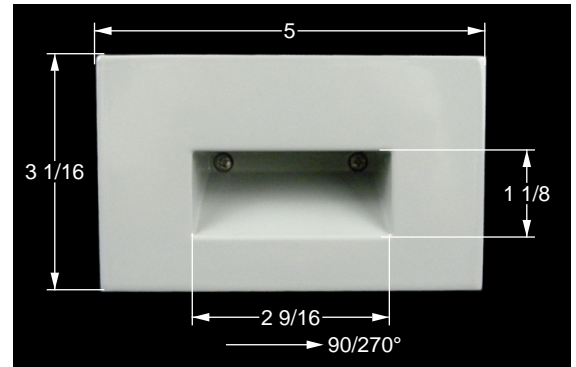
MOUNTING: RECESSED WALL

LED DRIVER: INTEGRAL TO CIRCUIT BOARD

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE LUMINAIRE.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 20.0 FEET



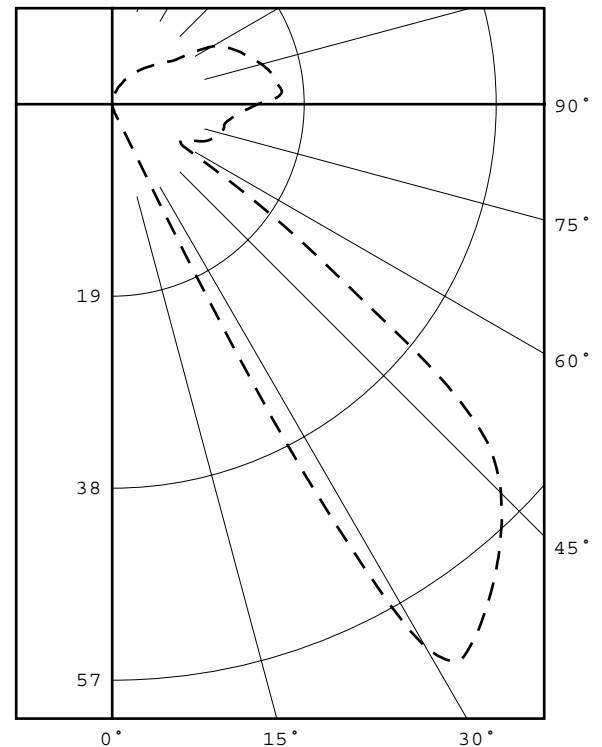
CANDELA DISTRIBUTION

FLUX

	0.0	45.0	90.0	135.0	180.0	
0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.1	0.1	0.0	0.0	0.0	0.0
15	0.7	0.4	0.0	0.0	0.0	0.1
25	6.3	1.1	0.0	0.0	0.0	1.4
35	63.3	21.4	0.0	0.0	0.0	9.1
45	54.4	53.7	0.0	0.0	0.0	13.1
55	19.7	42.1	0.0	0.0	0.0	9.8
65	8.4	11.9	0.0	0.0	0.0	4.2
75	11.1	5.6	0.0	0.0	0.0	3.2
85	12.3	6.7	0.0	0.0	0.0	3.7
90	14.4	7.5	0.0	0.0	0.0	
95	16.8	7.7	0.0	0.0	0.0	4.7
105	15.3	7.4	0.0	0.0	0.0	4.3
115	13.0	5.9	0.0	0.0	0.0	3.3
125	7.7	4.4	0.0	0.0	0.0	2.0
135	5.3	3.3	0.0	0.0	0.0	1.2
145	3.7	2.3	0.0	0.0	0.0	0.7
155	2.3	1.5	0.0	0.0	0.0	0.3
165	1.2	0.8	0.0	0.0	0.0	0.1
175	0.3	0.2	0.0	0.0	0.0	0.0
180	0.0	0.0	0.0	0.0	0.0	0.0

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	1.5	2.4
0- 40	10.6	17.3
0- 60	33.6	54.9
0- 90	44.7	73.0
90-120	12.2	20.0
90-130	14.2	23.2
90-150	16.1	26.3
90-180	16.5	27.0
0-180	61.2	100.0



LEGEND:
0-deg -----
90-deg =====
180-deg -----

EFFICACY = 19.9 lm/W
CIE TYPE - SEMI-DIRECT
PLANE : 0-DEG 90-DEG
BEAM ANGLE (50%) : 25.0 X N/A DEGREES
FIELD ANGLE (10%) : 104.1 X N/A DEGREES

Checked B. HYRE
Approved R. BEATTIE
Lighting Engineer



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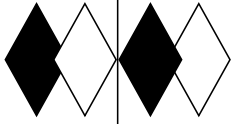
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LUMINANCE DATA IN CANDELA/SQ M

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
45	42160.	59454.	0.
55	12723.	38385.	0.
65	5008.	10247.	0.
75	6145.	4340.	0.
85	6574.	5193.	0.



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CANDELA DISTRIBUTION
 LATERAL ANGLE

	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	85.0	90.0	112.5	135.0	157.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
12.5	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
15.0	0.7	0.7	0.7	0.6	0.5	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0
17.5	1.0	1.0	1.0	0.8	0.6	0.5	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0
20.0	1.4	1.4	1.3	1.1	0.9	0.7	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0
22.5	2.0	2.0	1.8	1.6	1.2	0.9	0.6	0.4	0.2	0.0	0.0	0.0	0.0	0.0
25.0	6.3	5.9	3.2	2.1	1.6	1.1	0.7	0.4	0.2	0.0	0.0	0.0	0.0	0.0
27.5	41.6	40.6	30.8	8.0	2.1	1.4	0.9	0.5	0.2	0.0	0.0	0.0	0.0	0.0
30.0	62.1	61.6	54.9	41.5	8.3	1.8	1.1	0.5	0.3	0.0	0.0	0.0	0.0	0.0
32.5	64.8	65.1	64.9	60.8	39.5	2.9	1.3	0.7	0.3	0.1	0.0	0.0	0.0	0.0
35.0	63.3	63.5	63.5	63.4	57.7	21.4	1.6	0.8	0.4	0.1	0.0	0.0	0.0	0.0
37.5	61.4	61.6	61.6	61.6	61.0	43.4	2.0	0.9	0.4	0.1	0.0	0.0	0.0	0.0
40.0	59.3	59.5	59.6	59.6	59.2	56.7	9.0	1.1	0.4	0.1	0.0	0.0	0.0	0.0
42.5	57.0	57.2	57.3	57.4	57.0	56.0	26.6	1.2	0.5	0.1	0.0	0.0	0.0	0.0
45.0	54.4	54.5	54.8	54.9	54.5	53.7	38.7	1.4	0.5	0.1	0.0	0.0	0.0	0.0
47.5	50.9	51.0	51.7	52.1	51.9	51.1	41.4	2.2	0.6	0.1	0.0	0.0	0.0	0.0
50.0	43.2	43.8	46.4	48.6	49.0	48.3	39.3	6.8	0.6	0.1	0.0	0.0	0.0	0.0
52.5	29.0	30.0	35.2	42.2	45.7	45.3	37.1	8.5	0.7	0.1	0.0	0.0	0.0	0.0
55.0	19.7	20.0	22.3	29.6	40.2	42.1	34.5	8.8	0.7	0.1	0.0	0.0	0.0	0.0
57.5	11.9	12.3	15.1	19.3	29.1	38.3	31.7	8.5	0.8	0.1	0.0	0.0	0.0	0.0
60.0	7.9	7.9	8.4	11.9	18.2	31.6	28.9	7.8	0.8	0.2	0.0	0.0	0.0	0.0
62.5	7.8	7.7	7.7	7.8	11.6	19.5	25.7	7.0	0.9	0.2	0.0	0.0	0.0	0.0
65.0	8.4	8.4	8.2	7.6	7.0	11.9	20.9	6.3	1.1	0.2	0.0	0.0	0.0	0.0
67.5	9.6	9.6	9.3	8.4	6.7	5.8	12.5	5.6	1.4	0.2	0.0	0.0	0.0	0.0
70.0	10.3	10.2	10.2	9.6	7.4	4.9	7.6	4.8	1.4	0.2	0.0	0.0	0.0	0.0
72.5	10.7	10.6	10.5	10.0	8.1	5.3	3.4	3.0	1.3	0.2	0.0	0.0	0.0	0.0
75.0	11.1	11.1	10.9	10.3	8.3	5.6	3.4	2.3	1.3	0.3	0.0	0.0	0.0	0.0
77.5	11.3	11.2	11.1	10.5	8.5	5.8	3.6	2.4	1.3	0.3	0.0	0.0	0.0	0.0
80.0	11.3	11.3	11.1	10.5	8.7	6.1	3.8	2.5	1.4	0.3	0.0	0.0	0.0	0.0
82.5	11.7	11.7	11.4	10.6	8.9	6.4	4.0	2.7	1.4	0.3	0.0	0.0	0.0	0.0
85.0	12.3	12.3	12.0	11.2	9.4	6.7	4.2	2.8	1.4	0.3	0.0	0.0	0.0	0.0
87.5	13.2	13.1	12.9	12.1	10.5	7.2	4.5	2.9	1.5	0.4	0.0	0.0	0.0	0.0
90.0	14.4	14.5	14.4	13.7	11.4	7.5	4.8	3.1	1.5	0.4	0.0	0.0	0.0	0.0
92.5	16.4	16.2	16.1	15.3	13.1	7.5	5.0	3.2	1.5	0.4	0.0	0.0	0.0	0.0
95.0	16.8	16.8	16.5	15.7	12.8	7.7	5.2	3.3	1.6	0.4	0.0	0.0	0.0	0.0
97.5	16.4	16.2	15.9	15.3	12.6	7.8	5.2	3.3	1.6	0.4	0.0	0.0	0.0	0.0
100.0	16.2	16.0	15.7	15.1	12.4	7.8	5.2	3.3	1.5	0.4	0.0	0.0	0.0	0.0
102.5	15.8	15.7	15.5	14.5	11.8	7.7	5.2	3.2	1.5	0.4	0.0	0.0	0.0	0.0
105.0	15.3	15.2	14.9	13.9	11.3	7.4	5.1	3.0	1.4	0.3	0.0	0.0	0.0	0.0
107.5	14.7	14.6	14.3	13.3	10.8	7.1	4.9	2.9	1.4	0.3	0.0	0.0	0.0	0.0
110.0	14.1	14.0	13.6	12.7	10.4	6.8	4.6	2.8	1.4	0.3	0.0	0.0	0.0	0.0
112.5	13.6	13.5	12.9	12.2	10.0	6.4	4.4	2.7	1.3	0.3	0.0	0.0	0.0	0.0
115.0	13.0	12.9	12.4	11.6	9.2	5.9	4.1	2.6	1.3	0.3	0.0	0.0	0.0	0.0
117.5	12.4	12.2	11.8	10.8	7.8	5.4	3.9	2.5	1.2	0.3	0.0	0.0	0.0	0.0
120.0	11.4	11.2	10.6	9.3	6.5	5.0	3.7	2.3	1.2	0.3	0.0	0.0	0.0	0.0
122.5	9.7	9.6	8.8	7.2	5.9	4.7	3.4	2.2	1.1	0.3	0.0	0.0	0.0	0.0
125.0	7.7	7.6	7.2	6.4	5.5	4.4	3.2	2.1	1.1	0.2	0.0	0.0	0.0	0.0
127.5	6.9	6.8	6.5	5.9	5.1	4.1	3.0	2.0	1.0	0.2	0.0	0.0	0.0	0.0
130.0	6.3	6.3	6.0	5.5	4.7	3.8	2.8	1.9	1.0	0.2	0.0	0.0	0.0	0.0
132.5	5.8	5.8	5.5	5.0	4.4	3.5	2.6	1.7	0.9	0.2	0.0	0.0	0.0	0.0
135.0	5.3	5.3	5.1	4.6	4.0	3.3	2.5	1.6	0.9	0.2	0.0	0.0	0.0	0.0
137.5	4.9	4.9	4.7	4.3	3.7	3.0	2.3	1.5	0.8	0.2	0.0	0.0	0.0	0.0
140.0	4.5	4.4	4.3	3.9	3.4	2.8	2.1	1.4	0.7	0.2	0.0	0.0	0.0	0.0
142.5	4.1	4.0	3.9	3.5	3.1	2.5	1.9	1.3	0.7	0.2	0.0	0.0	0.0	0.0
145.0	3.7	3.7	3.5	3.2	2.8	2.3	1.8	1.2	0.6	0.1	0.0	0.0	0.0	0.0
147.5	3.3	3.3	3.2	2.9	2.5	2.1	1.6	1.1	0.6	0.1	0.0	0.0	0.0	0.0
150.0	3.0	2.9	2.8	2.6	2.3	1.9	1.4	1.0	0.5	0.1	0.0	0.0	0.0	0.0
152.5	2.7	2.6	2.5	2.3	2.0	1.7	1.3	0.9	0.5	0.1	0.0	0.0	0.0	0.0
155.0	2.3	2.3	2.2	2.0	1.8	1.5	1.1	0.8	0.4	0.1	0.0	0.0	0.0	0.0
157.5	2.0	2.0	1.9	1.8	1.6	1.3	1.0	0.7	0.4	0.1	0.0	0.0	0.0	0.0



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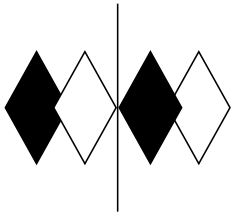
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CANDELA DISTRIBUTION
 LATERAL ANGLE

	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	85.0	90.0	112.5	135.0	157.5
160.0	1.8	1.7	1.7	1.5	1.4	1.1	0.9	0.6	0.3	0.1	0.0	0.0	0.0	0.0
162.5	1.4	1.4	1.4	1.3	1.1	0.9	0.7	0.5	0.3	0.0	0.0	0.0	0.0	0.0
165.0	1.2	1.2	1.0	0.9	0.9	0.8	0.6	0.4	0.2	0.0	0.0	0.0	0.0	0.0
167.5	0.9	0.9	0.9	0.8	0.7	0.6	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0
170.0	0.7	0.7	0.6	0.6	0.5	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0
172.5	0.5	0.5	0.4	0.4	0.4	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0
175.0	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
177.5	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION
 LATERAL ANGLE

	180.0
0.0	0.0
2.5	0.0
5.0	0.0
7.5	0.0
10.0	0.0
12.5	0.0
15.0	0.0
17.5	0.0
20.0	0.0
22.5	0.0
25.0	0.0
27.5	0.0
30.0	0.0
32.5	0.0
35.0	0.0
37.5	0.0
40.0	0.0
42.5	0.0
45.0	0.0
47.5	0.0
50.0	0.0
52.5	0.0
55.0	0.0
57.5	0.0
60.0	0.0
62.5	0.0
65.0	0.0
67.5	0.0
70.0	0.0
72.5	0.0
75.0	0.0
77.5	0.0
80.0	0.0
82.5	0.0
85.0	0.0
87.5	0.0
90.0	0.0
92.5	0.0
95.0	0.0
97.5	0.0
100.0	0.0
102.5	0.0
105.0	0.0
107.5	0.0
110.0	0.0
112.5	0.0
115.0	0.0
117.5	0.0
120.0	0.0
122.5	0.0
125.0	0.0
127.5	0.0
130.0	0.0
132.5	0.0
135.0	0.0
137.5	0.0
140.0	0.0
142.5	0.0
145.0	0.0
147.5	0.0
150.0	0.0
152.5	0.0
155.0	0.0
157.5	0.0



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CANDELA DISTRIBUTION
LATERAL ANGLE

	180.0
160.0	0.0
162.5	0.0
165.0	0.0
167.5	0.0
170.0	0.0
172.5	0.0
175.0	0.0
177.5	0.0
180.0	0.0



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	0.0
5- 10	0.0
10- 15	0.0
15- 20	0.0
20- 25	0.1
25- 30	1.3
30- 35	3.8
35- 40	5.4
40- 45	6.4
45- 50	6.7
50- 55	5.8
55- 60	4.0
60- 65	2.5
65- 70	1.7
70- 75	1.6
75- 80	1.6
80- 85	1.7
85- 90	2.0
90- 95	2.3
95-100	2.4
100-105	2.2
105-110	2.0
110-115	1.8
115-120	1.5
120-125	1.1
125-130	0.8
130-135	0.7
135-140	0.5
140-145	0.4
145-150	0.3
150-155	0.2
155-160	0.1
160-165	0.1
165-170	0.0
170-175	0.0
175-180	0.0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	0.0
0- 20	0.1
0- 30	1.5
0- 40	10.6
0- 50	23.7
0- 60	33.6
0- 70	37.8
0- 80	40.9
0- 90	44.7
0-100	49.4
0-110	53.6
0-120	56.9
0-130	58.9
0-140	60.1
0-150	60.7
0-160	61.1
0-170	61.2
0-180	61.2



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REPORT NUMBER: ITL87578-GONIOPHOTOMETRY

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ISSUE DATE: 06/15/16

PREPARED FOR: RAB LIGHTING INC.

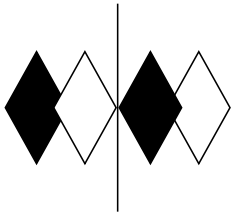
COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80				70				50			30			10			0	
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	113	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77	73
1	100	95	90	85	85	95	90	85	81	81	77	74	72	69	67	64	62	60	56
2	90	81	74	67	67	85	77	70	64	69	63	59	62	57	53	55	51	48	45
3	81	70	61	54	54	76	66	58	52	59	53	47	53	48	43	47	43	39	36
4	73	60	51	44	44	69	57	49	42	51	44	39	46	40	35	41	36	32	29
5	66	53	43	36	36	62	50	41	35	45	37	32	40	34	29	35	30	26	23
6	60	46	37	30	30	57	44	35	29	39	32	26	35	29	24	31	26	22	19
7	55	41	31	25	25	52	39	30	24	35	27	22	31	25	20	27	22	18	15
8	50	36	27	21	21	47	34	26	20	31	24	18	27	21	17	24	19	15	13
9	46	32	24	18	18	44	31	23	17	27	21	16	24	18	14	22	16	13	10
10	43	29	21	15	15	40	28	20	15	25	18	13	22	16	12	19	14	11	9

ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS TEST SAMPLE.

NOTE: THE ZONAL CAVITY CALCULATION TECHNIQUE IS ACCURATE WHEN LUMINAIRES WITH SYMMETRIC CANDELA DISTRIBUTIONS ARE EMPLOYED AND WHEN THE LUMINAIRES ARE LOCATED SYMMETRICALLY THROUGHOUT THE ROOM. THIS UNIT HAS SPECIAL CHARACTERISTICS AND THEREFORE THESE COEFFICIENTS SHOULD BE USED WITH CAUTION.



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PAGE: 9 OF 9

ADDRESS: 170 LUDLOW AVE.
NORTHVALE, NJ 07647

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REPORT NUMBER: ITL87578-SPHERE
DATE: 06/20/16
PREPARED FOR: RAB LIGHTING INC.
CATALOG NUMBER: FSLEDH3NS/120 - FSLEDH3NS/120/TL

ADDRESS: 170 LUDLOW AVE.
NORTHVALE, NJ 07647

LUMINAIRE: CAST SILVER PAINTED METAL HOUSING/FACEPLATE, CAST SILVER PAINTED METAL CIRCUIT BOARD MOUNTING BASE WITH UNFINISHED CIRCUIT BOARD MOUNTING SURFACE, 1 WHITE CIRCUIT BOARD WITH 3 LEDS, CLEAR FLAT GLASS LENS.

LAMP: THREE WHITE MULTI-CHIP LIGHT EMITTING DIODES (LEDs), VERTICAL BASE-UP POSITION.

DRIVER: INTEGRAL TO CIRCUIT BOARD

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE LUMINAIRE.

INSTRUMENTS:	Associated Power Technologies APT5020 AC Power Source	Calibration Due:
	Yokogawa WT210 Digital Power Meter #4	N/A
	Ocean Optics QE65000 Spectroradiometer	04/07/17
	ITL 1.5m Diameter Integrating Sphere S15-2, 4PI Geometry	04/19/17

OBJECT OF TEST: Measure the Absolute Flux in lumens*, Spectral Power Distribution (SPD), Correlated Color Temperature (CCT), Color Rendering Index (CRIa,1-14), Chromaticity Coordinates (x,y; u',v'), ANSI C78.377 Duv, Total Radiant Flux*, Scotopic / Photopic Lumen Ratio, and electrical data including ANSI C82.77-2002 Power Factor (PF) and Total Harmonic Distortion (THD) to the test sample.

PROCEDURE: The test sample was provided by the customer and had an unknown number of operating hours. The test sample was mounted inside the integrating sphere and allowed to stabilize. After stabilization occurred, measurements were taken. In order to measure mean performance, multiple data sets were recorded and averaged. Readings were taken with the test sample operating at 120VAC input in a 25 +/-1 degree Celsius free air ambient and in accordance with IESNA LM-79-08. All data are traceable to the National Institute of Standards and Technology.

RESULTS: (continued subsequent pages)

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Checked	<i>N WHITE</i>
Approved	<i>P O'CONNOR</i> Sphere Lab Supervisor



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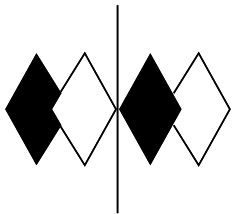
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RESULTS:

PHOTOMETRIC	
Total Integrated Flux (lumens)	61.2 *
SPECTRORADIOMETRIC	
Observer	CIE 1931 2 degree
Chromaticity Ordinate x	0.3742
Chromaticity Ordinate y	0.3768
Observer	CIE 1976 2 degree
Chromaticity Ordinate u'	0.2210
Chromaticity Ordinate v'	0.5007
Correlated Color Temp CCT (K)	4173
ANSI C78.377-2008 Duv	0.002
Total Radiant Flux (milliWatts)	186 *
Scotopic / Photopic Lumen Ratio	1.759
ELECTRICAL	
Input Voltage (Volts AC)	120.0
Input Current (Amps AC)	0.027
Input Power (Watts)	3.08
Input Power Factor (%)	95.1
Input Current THD (%)	31.4
Input Voltage THD (%)	0.3
EFFICACY (lumens/Watt)	19.9

COLOR RENDERING INDICES	CRI
Ra (Average 1-8)	82
R1 Light greyish red	79
R2 Dark greyish yellow	87
R3 Strong yellowish green	94
R4 Moderate yellowish green	81
R5 Light bluish green	80
R6 Light blue	83
R7 Light violet	86
R8 Light reddish purple	64
R9 Strong red	4
R10 Strong yellow	71
R11 Strong green	80
R12 Strong blue	64
R13 Light yellowish pink (skin)	81
R14 Moderate olive green (leaf)	97

*NOTE: The total lumen output shown on this report was obtained from photometric test ITL87578-GONIOPHOTOMETRY



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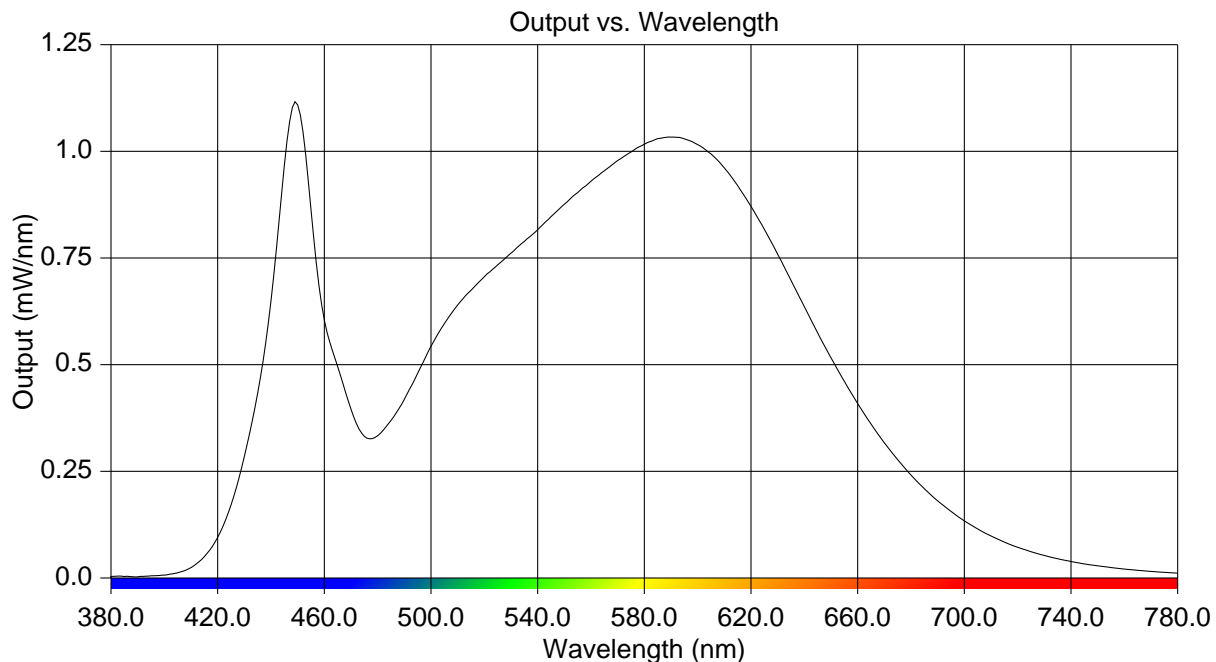
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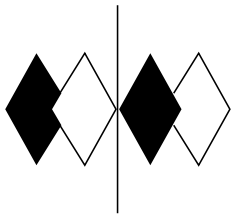
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RESULTS:

Wavelength	mW per nm	Wavelength	mW per nm	Wavelength	mW per nm
380	0.004	515	0.674	650	0.516
385	0.003	520	0.706	655	0.461
390	0.003	525	0.734	660	0.409
395	0.005	530	0.761	665	0.361
400	0.007	535	0.789	670	0.317
405	0.012	540	0.816	675	0.277
410	0.024	545	0.847	680	0.241
415	0.050	550	0.876	685	0.209
420	0.095	555	0.903	690	0.181
425	0.171	560	0.930	695	0.156
430	0.285	565	0.954	700	0.134
435	0.433	570	0.978	705	0.115
440	0.649	575	0.998	710	0.099
445	0.967	580	1.017	715	0.084
450	1.109	585	1.030	720	0.072
455	0.864	590	1.033	725	0.062
460	0.605	595	1.029	730	0.053
465	0.495	600	1.016	735	0.045
470	0.396	605	0.994	740	0.039
475	0.332	610	0.961	745	0.033
480	0.334	615	0.920	750	0.029
485	0.369	620	0.871	755	0.025
490	0.419	625	0.817	760	0.021
495	0.480	630	0.759	765	0.018
500	0.543	635	0.698	770	0.015
505	0.596	640	0.636	775	0.013
510	0.640	645	0.574	780	0.011





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CIE Chromaticity Diagram

