

REPORT NUMBER: ITL88316-GONIOPHOTOMETRY

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ISSUE DATE: 09/22/16

PREPARED FOR: B-K LIGHTING, INC.

CATALOG NUMBER: AP-LED-x51-NFL-12-C

LUMINAIRE: MACHINED BLACK PAINTED METAL WALL MOUNTING BRACKET AND HOUSING WITH DIFFUSE CIRCUIT BOARD MOUNTING BASE, 1 CIRCUIT BOARD WITH 1 LED, MOLDED WHITE PLASTIC LED SURROUND/REFLECTOR MOUNTING BASE, MOLDED MULTI-FACETED WHITE PLASTIC REFLECTOR WITH SPECULAR FINISH, CLEAR MICRO-PRISMATIC FLAT GLASS LENS IN MACHINED BLACK PAINTED CYLINDRICAL METAL FRAME WITH UNFINISHED INTERIOR. LENS PRISMS OUT.

LAMP: ONE WHITE MULTI-CHIP LIGHT EMITTING DIODE (LED), VERTICAL BASE-UP POSITION.

INPUT ELECTRICAL: 120.0 VOLTS, 57.9 WATTS, 0.485 AMPS

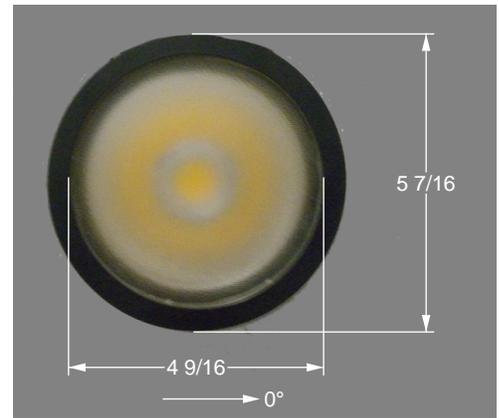
MOUNTING: WALL

LED DRIVER: THOMAS RESEARCH PRODUCTS PLED75W-054-C1400-D, DRIVER HAS MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST.

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

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 20.0 FEET



DEG	CANDELA	LUMENS
0	24122	
5	21970	1809
15	6305	1829
25	1377	670
35	172	126
45	73	57
55	38	35
65	25	25
75	15	16
85	5	5
90	0	

ZONAL LUMEN SUMMARY		
ZONE	LUMENS	%FIXT
0- 30	4309	94.2
0- 40	4435	97.0
0- 60	4527	99.0
0- 90	4574	100.0
90-180	0	0.0
0-180	4574	100.0

EFFICACY = 79.0 lm/W

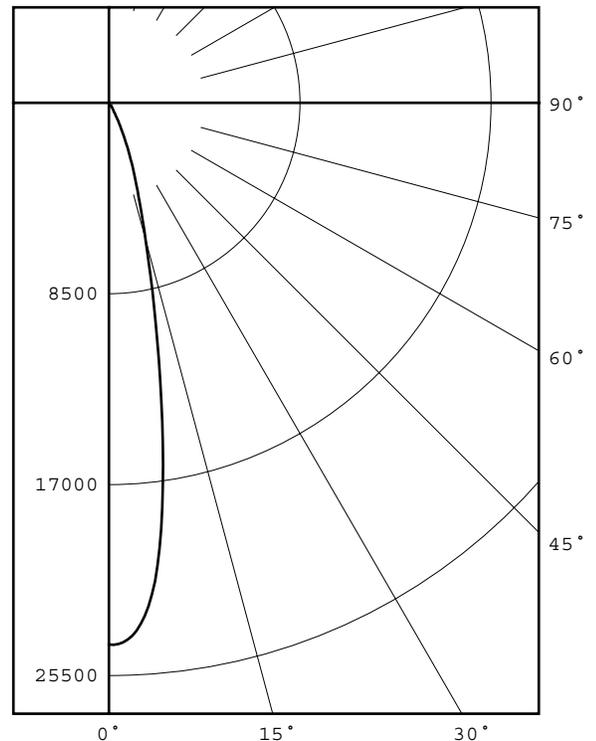
CIE TYPE - DIRECT

LUMINAIRE SPACING CRITERION = 0.37

BEAM ANGLE (50%) : 21.5 DEGREES

FIELD ANGLE (10%) : 43.6 DEGREES

LUMINOUS DIAMETER: 4.562



LUMINANCE DATA IN CANDELA/SQ M

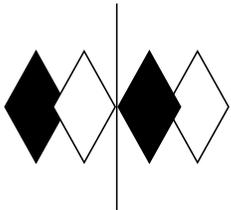
ANGLE AVERAGE

IN DEG

45	9788.
55	6281.
65	5608.
75	5495.
85	5439.

Checked J. VILLANUEVA

Approved R. BEATTIE  
Lighting Engineer



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THE LIGHT CENTER OF THE INDUSTRY SINCE 1955



INDEPENDENT TESTING LABORATORIES, INC.  
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## CANDELA DISTRIBUTION

0.0	24122
0.5	24126
1.0	24102
1.5	24030
2.0	23914
2.5	23755
3.0	23532
3.5	23245
4.0	22902
4.5	22485
5.0	21970
5.5	21401
6.0	20713
6.5	19936
7.0	19118
7.5	18198
8.0	17237
8.5	16311
9.0	15322
9.5	14378
10.0	13378
10.5	12512
11.0	11635
11.5	10797
12.0	10004
12.5	9282
13.0	8585
13.5	7937
14.0	7339
14.5	6806
15.0	6305
16.0	5444
17.0	4717
18.0	4110
19.0	3587
20.0	3128
22.5	2146
25.0	1377
27.5	805
30.0	433
32.5	255
35.0	172
37.5	129
40.0	104
42.5	87
45.0	73
47.5	61
50.0	52
52.5	44
55.0	38
57.5	34
60.0	30
62.5	27
65.0	25
67.5	23
70.0	20
72.5	18
75.0	15
77.5	13
80.0	10
82.5	8
85.0	5
87.5	2
90.0	0



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5-DEGREE  
ZONAL LUMEN SUMMARY

0- 5	554
5- 10	1255
10- 15	1097
15- 20	733
20- 25	456
25- 30	214
30- 35	81
35- 40	44
40- 45	32
45- 50	25
50- 55	19
55- 60	16
60- 65	13
65- 70	12
70- 75	9
75- 80	7
80- 85	4
85- 90	1

10-DEGREE  
ZONAL LUMEN SUMMARY

0- 10	1809
0- 20	3639
0- 30	4309
0- 40	4435
0- 50	4492
0- 60	4527
0- 70	4552
0- 80	4568
0- 90	4574



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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	119	119	119	119	116	116	116	116	111	111	111	111	106	106	106	102	102	102	100
1	115	113	111	110	113	111	109	107	107	105	104	103	103	102	101	100	99	98	96
2	111	107	104	102	109	106	103	101	103	100	99	100	98	97	97	96	95	93	93
3	108	103	99	96	106	102	98	96	99	96	94	97	95	93	95	93	91	90	90
4	104	99	95	92	103	98	94	91	96	93	90	94	91	89	92	90	88	87	87
5	101	95	91	88	100	95	91	88	93	90	87	91	89	86	90	88	86	85	85
6	98	92	88	85	97	92	88	85	90	87	84	89	86	84	88	85	83	82	82
7	96	89	85	82	95	89	85	82	88	84	82	87	84	81	86	83	81	80	80
8	93	87	83	80	92	86	82	80	85	82	80	85	81	79	84	81	79	78	78
9	91	84	80	78	90	84	80	78	83	80	77	83	79	77	82	79	77	76	76
10	89	82	78	76	88	82	78	76	81	78	75	81	77	75	80	77	75	74	74

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.

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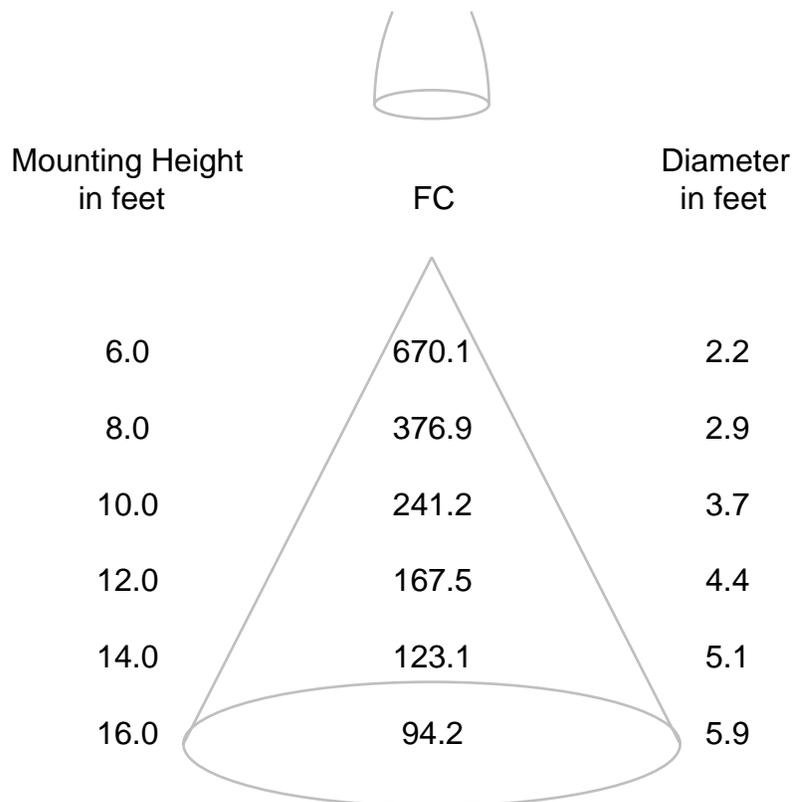
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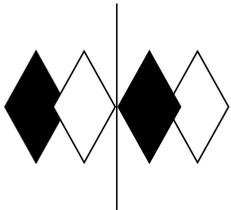
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## CONE OF LIGHT DIAGRAM

(diameter shown is where fc value is half the fc at nadir)





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