

REPORT NUMBER: SCALED FROM RAB00970

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ISSUE DATE: 07/29/15

DATE SAMPLE TESTED: 07/29/15

PREPARED FOR: RAB LIGHTING INC.

CATALOG NUMBER: SHARK4-50NW/480 (STANDARD DISTRIBUTION)

LUMINAIRE: FABRICATED WHITE PLASTIC HOUSING, PERFORATED WHITE METAL HEAT SINK, 2 WHITE CIRCUIT BOARDS EACH WITH 64 LEDS, FROSTED POLYCARBONATE LENS ENCLOSURE.

LAMPS: ONE HUNDRED AND TWENTY EIGHT WHITE EMITTING DIODES (LEDs), TILTED 15-DEGREE FROM VERTICAL BASE-UP POSITION.

TOTAL INPUT WATTS = 52.362 AT 480.0 VOLTS

LED DRIVERS: RD-H065-A1360-480

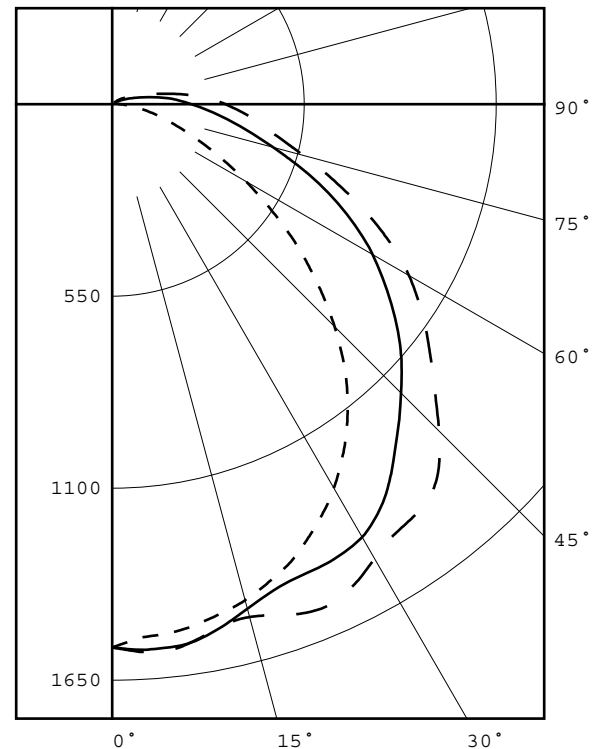
(SEE PAGE 2 FOR MORE INFORMATION)

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	1556	1556	1556	1556	1556
5	1527	1540	1566	1576	1573
15	1471	1492	1497	1509	1521
25	1353	1363	1452	1537	1556
35	1167	1213	1366	1425	1467
45	902	1022	1170	1308	1325
55	590	739	971	1074	1094
65	318	461	740	829	847
75	147	257	477	558	568
85	51	130	294	374	394
90	19	90	228	305	323
95	16	63	173	235	250
105	12	20	73	105	112
115	9	9	24	46	51
125	5	5	5	12	18
135	4	4	4	4	4
145	4	4	3	4	4
155	4	4	3	3	3
165	4	4	3	3	3
175	5	4	3	3	3
180	4	4	4	4	4

FLUX

148
425
669
833
888
811
648
440
280
165
72
28
8
3
2
2
1
0



LEGEND:

0-deg: - - - - -
 45-deg: _____
 90-deg: - . - . - .

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	1241	22.9
0- 40	2075	38.2
0- 60	3774	69.6
0- 90	5142	94.8
90-120	265	4.9
90-130	273	5.0
90-150	279	5.1
90-180	282	5.2
0-180	5424	100.0

TOTAL INPUT WATTS = 52.362

EFFICACY = 103.6 Lm/W

CIE TYPE - DIRECT

PLANE : 0-DEG 90-DEG

SPACING CRITERIA : 1.2 1.4

Checked X.CAO
 Approved D.WANG-MUNSON

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ADDITIONAL INFORMATION

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT
VOLTAGE TO THE LED DRIVERS.
TEST PROCEDURE: IESNA LM-79-08
TEST DISTANCE = 28.25 FEET
ACCREDITED LABORATORY CODE 201058-0

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PLANE : 0-DEG 90-DEG
BEAM ANGLE (50%) : 97.4 X 134.1 DEGREES
FIELD ANGLE (10%): 148.4 X 202.2 DEGREES

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CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0.0	1556	1556	1556	1556	1556
5.0	1527	1540	1566	1576	1573
10.0	1505	1525	1548	1546	1545
15.0	1471	1492	1497	1509	1521
20.0	1422	1436	1460	1529	1554
25.0	1353	1363	1452	1537	1556
30.0	1270	1287	1432	1488	1503
35.0	1167	1213	1366	1425	1467
40.0	1045	1128	1265	1388	1434
45.0	902	1022	1170	1308	1325
50.0	746	889	1078	1184	1199
55.0	590	739	971	1074	1094
60.0	443	595	862	961	982
65.0	318	461	740	829	847
70.0	219	351	607	688	701
75.0	147	257	477	558	568
80.0	92	185	376	449	465
85.0	51	130	294	374	394
90.0	19	90	228	305	323
95.0	16	63	173	235	250
100.0	14	39	117	164	172
105.0	12	20	73	105	112
110.0	11	10	45	70	77
115.0	9	9	24	46	51
120.0	6	6	7	28	33
125.0	5	5	5	12	18
130.0	5	5	5	5	5
135.0	4	4	4	4	4
140.0	4	4	4	4	4
145.0	4	4	3	4	4
150.0	4	3	3	3	3
155.0	4	4	3	3	3
160.0	4	4	3	3	3
165.0	4	4	3	3	3
170.0	4	4	3	3	3
175.0	5	4	3	3	3
180.0	4	4	4	4	4

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ZONAL LUMEN SUMMARY

0- 5	37.
5- 10	111.
10- 15	180.
15- 20	245.
20- 25	308.
25- 30	361.
30- 35	402.
35- 40	432.
40- 45	447.
45- 50	441.
50- 55	421.
55- 60	390.
60- 65	349.
65- 70	299.
70- 75	244.
75- 80	196.
80- 85	157.
85- 90	124.
90- 95	96.
95-100	69.
100-105	45.
105-110	27.
110-115	17.
115-120	10.
120-125	6.
125-130	3.
130-135	2.
135-140	2.
140-145	1.
145-150	1.
150-155	1.
155-160	1.
160-165	1.
165-170	0.
170-175	0.
175-180	0.

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5-DEGREE ZONAL LUMEN SUMMARY

0- 5	37
5- 10	111
10- 15	180
15- 20	245
20- 25	308
25- 30	361
30- 35	402
35- 40	432
40- 45	447
45- 50	441
50- 55	421
55- 60	390
60- 65	349
65- 70	299
70- 75	244
75- 80	196
80- 85	157
85- 90	124
90- 95	96
95-100	69
100-105	45
105-110	27
110-115	17
115-120	10
120-125	6
125-130	3
130-135	2
135-140	2
140-145	1
145-150	1
150-155	1
155-160	1
160-165	1
165-170	0
170-175	0
175-180	0

10-DEGREE ZONAL LUMEN SUMMARY

0- 10	148
0- 20	573
0- 30	1241
0- 40	2075
0- 50	2963
0- 60	3774
0- 70	4421
0- 80	4862
0- 90	5142
0-100	5307
0-110	5379
0-120	5407
0-130	5415
0-140	5419
0-150	5421
0-160	5423
0-170	5424
0-180	5424

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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	118	118	118	118	114	114	114	114	108	108	108	103	103	103	97	97	97	95
1	106	100	96	91	103	98	93	89	92	89	85	88	85	82	83	81	78	76
2	96	87	79	73	93	84	78	72	80	74	69	76	71	67	72	68	65	62
3	87	76	67	60	84	74	66	59	70	63	58	66	61	56	63	58	54	52
4	79	67	58	51	77	65	57	50	62	54	49	59	53	47	56	51	46	44
5	73	59	50	43	70	58	49	43	55	48	42	53	46	41	50	45	40	38
6	67	53	44	38	65	52	43	37	50	42	36	48	41	36	46	40	35	33
7	62	48	39	33	60	47	39	33	45	38	32	43	36	31	41	35	31	29
8	58	44	35	29	56	43	35	29	41	34	28	40	33	28	38	32	28	25
9	54	40	32	26	52	39	31	26	38	31	26	36	30	25	35	29	25	23
10	51	37	29	24	49	36	29	23	35	28	23	34	27	23	32	27	22	21

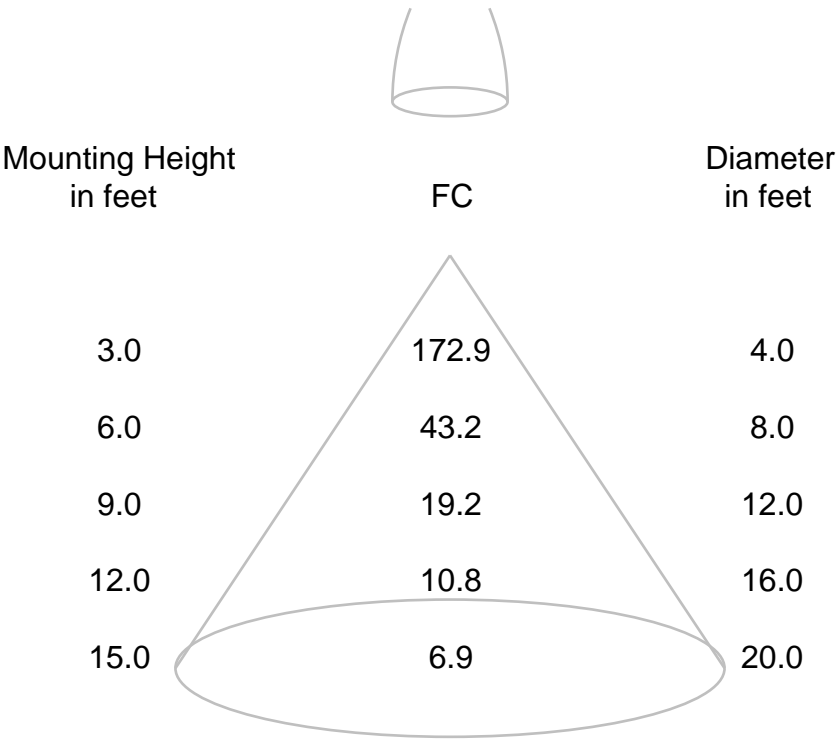
ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS LUMINAIRE SAMPLE.

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CONE OF LIGHT DIAGRAM

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



Note: The candela values used to generate this diagram were obtained by averaging the photometric data into a single plane.