

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P521815

Luminaire Tested: SQ4-WB-075U-050D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521815
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-075U-050D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5366.8 lumens
Efficiency: N/A
Efficacy: 122.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

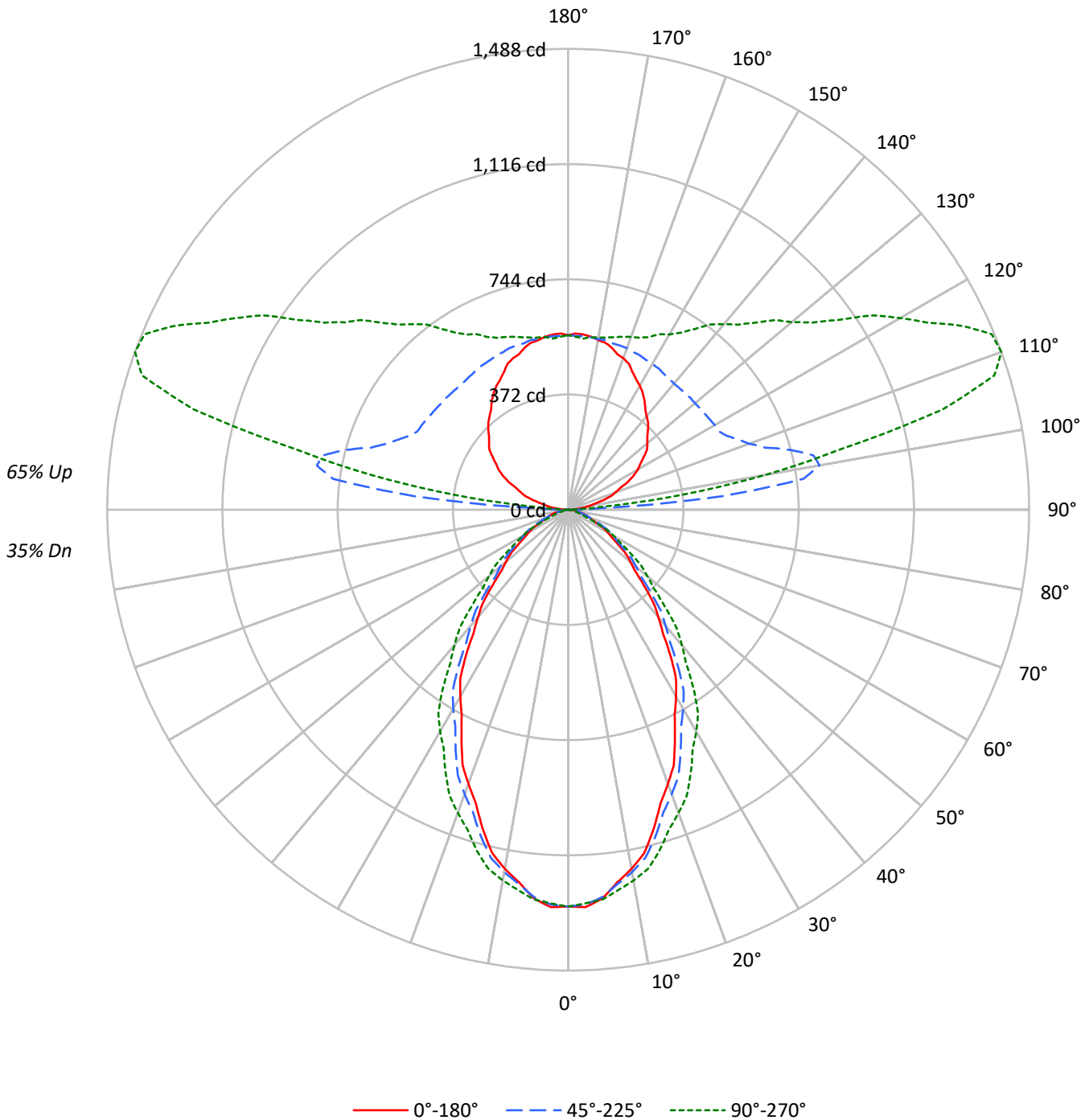
Input Watts (W): 44
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									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	50	30	10	50	30	10	0														
RCR																																						
0	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35																				
1	95	91	88	85	86	83	80	77	67	65	63	52	51	50	38	38	37	31																				
2	87	81	75	70	79	73	69	65	59	56	53	47	45	43	35	34	33	27																				
3	80	72	65	60	72	65	60	55	53	49	46	42	39	37	32	30	29	24																				
4	74	64	57	51	67	58	52	47	48	43	40	38	35	33	29	27	25	21																				
5	68	57	50	44	61	52	46	41	43	38	35	34	31	29	26	24	23	19																				
6	63	52	44	39	57	47	41	36	39	34	31	31	28	26	24	22	20	17																				
7	58	47	39	34	53	43	37	32	36	31	27	29	25	23	22	20	19	16																				
8	54	43	35	31	49	39	33	29	33	28	25	27	23	21	21	19	17	14																				
9	50	39	32	27	46	36	30	26	30	25	22	25	21	19	19	17	15	13																				
10	47	36	29	25	43	33	27	23	28	23	20	23	20	17	18	16	14	12																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11822	11822	11822
5°	11674	11632	11700
10°	11030	11130	11387
15°	10182	10418	10885
20°	9246	9593	10229
25°	8293	8746	9529
30°	7415	7901	8804
35°	6484	6953	7947
40°	5457	5891	6880
45°	4504	4893	5744
50°	3761	4099	4785
55°	3193	3518	3952
60°	2729	3050	3154
65°	2172	2565	2037
70°	1926	2002	1244
75°	1782	1622	763
80°	1642	1493	659
85°	1493	1366	540

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5744 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.5	2.2
10°-20°	305.7	5.7
20°-30°	395.9	7.4
30°-40°	387.7	7.2
40°-50°	296.8	5.5
50°-60°	197.8	3.7
60°-70°	107.9	2.0
70°-80°	45.0	0.8
80°-90°	12.7	0.2
90°-100°	256.7	4.8
100°-110°	730.5	13.6
110°-120°	699.9	13.0
120°-130°	553.9	10.3
130°-140°	444.6	8.3
140°-150°	348.1	6.5
150°-160°	254.7	4.7
160°-170°	157.8	2.9
170°-180°	53.5	1.0
0°-30°	819.2	15.3
0°-40°	1206.9	22.5
0°-60°	1701.4	31.7
0°-90°	1867.1	34.8
90°-120°	1687.1	31.4
90°-150°	3033.8	56.5
90°-180°	3500.0	65.2
0°-180°	5366.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1281	1281	1281	1281	1281	
5°	1260	1248	1256	1259	1263	117
15°	1066	1062	1091	1120	1140	298
25°	815	817	859	896	936	375
35°	576	578	617	659	706	358
45°	345	352	375	403	440	269
55°	198	207	219	227	246	180
65°	100	108	118	103	93	103
75°	50	50	46	31	21	53
85°	14	14	13	8	5	15
90°	0	0	0	0	0	2
95°	28	111	497	172	106	32
105°	114	172	744	1315	1250	120
115°	211	255	564	1196	1404	208
125°	298	330	539	894	1069	267
135°	364	395	532	755	854	281
145°	430	452	537	654	712	268
155°	491	502	550	591	615	227
165°	542	544	556	568	576	152
175°	568	565	562	559	555	54
180°	563	563	563	563	563	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1281.3	1281.3	1281.3	1281.3	1281.3
2.5°	1284.4	1273.0	1275.9	1275.8	1272.3
5°	1260.5	1247.8	1256.0	1258.9	1263.3
7.5°	1213.7	1204.1	1219.0	1230.0	1238.9
10°	1177.3	1169.0	1188.0	1204.0	1215.5
12.5°	1135.0	1128.1	1151.5	1173.0	1188.1
15°	1066.0	1062.1	1090.7	1120.4	1139.6
17.5°	992.1	990.2	1023.0	1057.6	1082.3
20°	941.7	941.2	977.1	1013.2	1041.8
22.5°	890.9	892.1	929.9	967.4	999.9
25°	814.6	816.8	859.1	896.5	936.1
27.5°	744.1	745.1	788.8	828.3	870.5
30°	696.0	698.8	741.6	782.5	826.4
32.5°	647.9	651.1	693.0	735.3	780.1
35°	575.7	578.5	617.3	658.8	705.6
37.5°	501.3	505.0	539.5	578.8	624.7
40°	453.1	458.6	489.1	526.1	571.2
42.5°	406.8	413.6	441.9	477.0	517.7
45°	345.2	351.8	375.0	403.4	440.2
47.5°	292.1	299.7	317.5	342.0	373.4
50°	262.0	269.1	285.6	303.7	333.4
52.5°	235.5	242.6	257.3	271.2	296.5
55°	198.5	206.7	218.7	227.0	245.7
57.5°	168.1	176.0	185.5	189.3	200.6
60°	147.9	156.7	165.3	164.9	170.9
62.5°	129.4	136.9	145.5	139.5	139.9
65°	99.5	107.8	117.5	102.7	93.3
67.5°	80.4	82.2	92.2	71.6	60.5
70°	71.4	71.4	74.2	55.4	46.1
72.5°	62.9	62.9	60.3	45.1	35.3
75°	50.0	50.0	45.5	31.3	21.4
77.5°	38.6	38.1	34.9	23.3	15.5
80°	30.9	30.9	28.1	18.4	12.4
82.5°	24.2	24.2	21.8	14.4	9.2
85°	14.1	14.1	12.9	8.4	5.1
87.5°	4.9	4.9	4.5	2.7	2.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.6	45.4	105.4	30.7	23.1
95°	27.8	110.6	497.0	172.0	106.0
97.5°	51.2	129.5	765.4	547.7	375.3
100°	67.5	140.8	823.7	834.3	642.7
102.5°	85.5	152.9	810.8	1068.0	900.6
105°	113.5	172.2	744.4	1314.9	1250.0
107.5°	142.0	194.6	666.9	1384.6	1442.4
110°	161.7	211.0	622.3	1357.9	1487.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.6	227.3	592.3	1294.9	1480.1
115°	211.0	255.0	564.5	1195.8	1404.3
117.5°	237.8	279.1	548.0	1087.5	1308.3
120°	259.2	293.8	546.3	1025.6	1237.2
122.5°	276.4	310.9	542.0	971.3	1167.7
125°	297.8	330.2	538.8	894.1	1069.0
127.5°	321.1	351.5	537.1	848.0	992.1
130°	333.1	363.5	534.5	815.8	941.5
132.5°	346.0	375.5	534.5	790.8	906.4
135°	364.2	394.6	532.4	755.2	853.7
137.5°	381.3	410.9	532.1	725.2	810.2
140°	394.2	424.5	531.3	700.2	781.9
142.5°	408.7	434.1	533.9	680.3	753.6
145°	429.5	451.5	536.6	653.7	712.3
147.5°	447.3	468.7	541.4	626.7	677.4
150°	462.7	477.4	543.1	617.8	653.4
152.5°	474.7	490.2	544.8	605.7	638.8
155°	490.6	502.1	549.5	590.7	614.8
157.5°	510.3	517.2	550.6	583.9	601.1
160°	520.6	525.8	554.8	578.7	593.4
162.5°	526.6	532.6	555.7	574.4	585.7
165°	542.0	544.1	555.9	567.9	576.3
167.5°	552.5	550.6	560.8	566.3	569.6
170°	555.9	554.9	559.1	560.3	564.5
172.5°	563.6	560.1	561.7	558.6	561.9
175°	567.7	564.6	562.3	559.0	554.8
177.5°	569.4	564.4	561.7	558.3	559.1
180°	563.4	563.4	563.4	563.4	563.4

(END OF REPORT)