

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: P521113

Luminaire Tested: SQ4-BB-075U-100D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521113
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-075U-100D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 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: 6228.9 lumens
Efficiency: N/A
Efficacy: 95.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

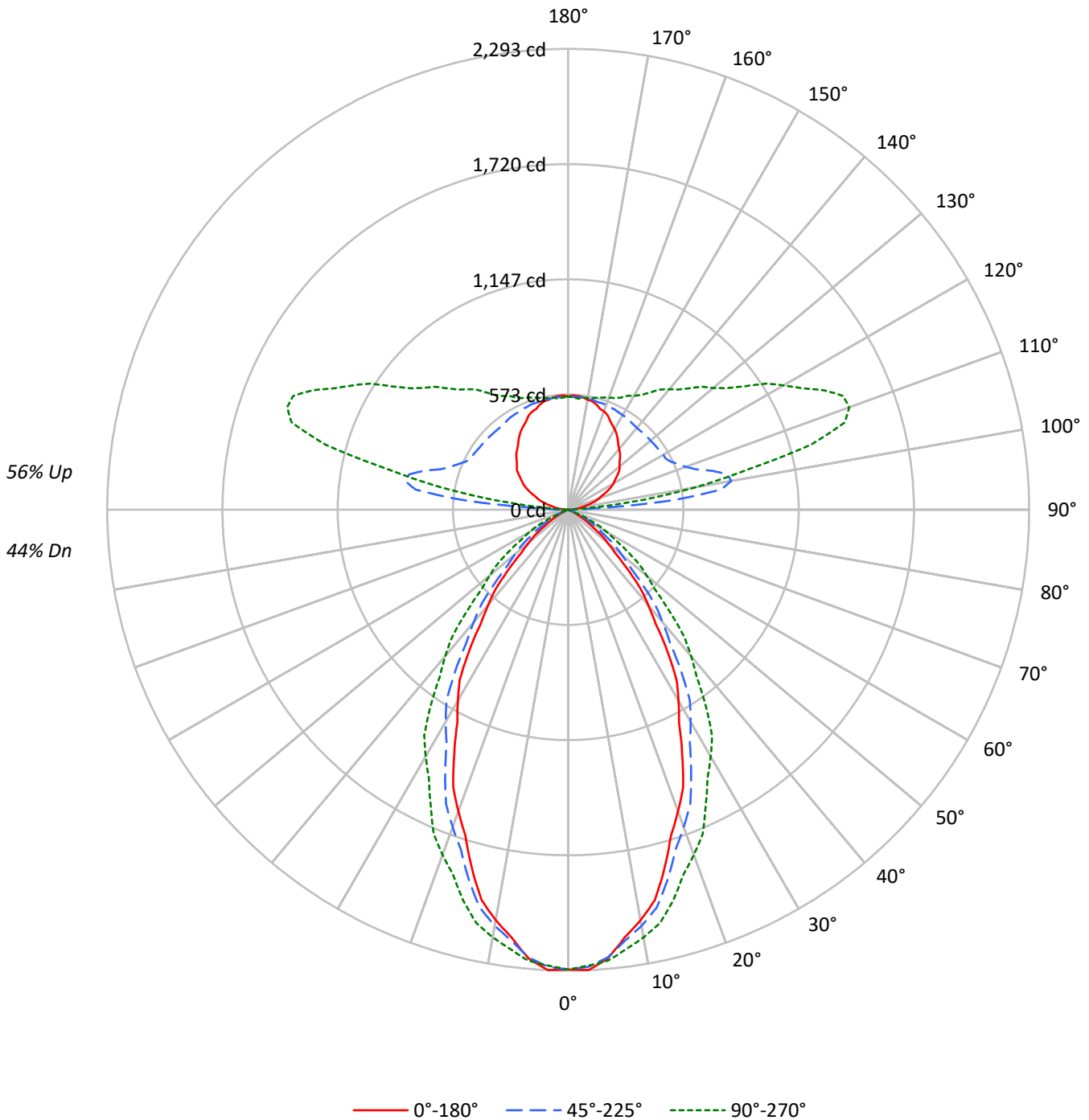
Input Watts (W): 65.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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
RCR																				
0	106	106	106	106	97	97	97	97	80	80	80		65	65	65		50	50	50	44
1	98	94	91	88	90	87	84	81	72	70	69		59	58	57		47	46	46	40
2	91	84	79	75	83	78	73	69	65	62	59		54	52	50		43	42	41	36
3	84	75	69	64	77	70	64	60	59	55	52		49	46	44		40	38	37	33
4	77	68	61	56	71	63	57	52	54	49	46		45	42	39		37	35	33	30
5	72	61	54	49	66	57	51	46	49	44	41		41	38	35		34	32	30	27
6	67	56	49	43	61	52	46	41	45	40	36		38	34	32		32	29	27	24
7	62	51	44	39	57	48	41	37	41	36	33		35	31	29		29	27	25	22
8	58	47	40	35	53	44	37	33	38	33	30		32	29	26		27	25	23	21
9	54	43	36	32	50	40	34	30	35	30	27		30	27	24		26	23	21	19
10	51	40	33	29	47	37	31	27	33	28	25		28	25	22		24	21	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21109	21109	21109
5°	20769	20717	20871
10°	19432	19692	20242
15°	17666	18226	19242
20°	15682	16497	17942
25°	13656	14739	16484
30°	11698	12982	15106
35°	9699	11021	13439
40°	7452	8811	11451
45°	5387	6673	9214
50°	3670	4972	7307
55°	2385	3597	5680
60°	1369	2532	4106
65°	362	1546	2078
70°	178	477	596
75°	78	39	0
80°	58	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9214 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.8	3.4
10°-20°	533.9	8.6
20°-30°	668.4	10.7
30°-40°	617.4	9.9
40°-50°	414.9	6.7
50°-60°	214.3	3.4
60°-70°	67.1	1.1
70°-80°	4.2	0.1
80°-90°	0.1	0.0
90°-100°	256.7	4.1
100°-110°	730.5	11.7
110°-120°	699.9	11.2
120°-130°	553.9	8.9
130°-140°	444.6	7.1
140°-150°	348.1	5.6
150°-160°	254.7	4.1
160°-170°	157.8	2.5
170°-180°	53.5	0.9
0°-30°	1411.2	22.7
0°-40°	2028.6	32.6
0°-60°	2657.8	42.7
0°-90°	2729.2	43.8
90°-120°	1687.1	27.1
90°-150°	3033.8	48.7
90°-180°	3500.0	56.2
0°-180°	6228.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2288	2288	2288	2288	2288	
5°	2242	2220	2237	2245	2254	208
15°	1850	1843	1908	1972	2014	515
25°	1342	1352	1448	1547	1619	615
35°	861	883	978	1094	1193	533
45°	413	438	511	611	706	324
55°	148	173	224	287	353	138
65°	17	32	71	85	95	28
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
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°	2287.9	2287.9	2287.9	2287.9	2287.9
2.5°	2293.2	2271.5	2277.2	2277.1	2271.0
5°	2242.5	2219.7	2236.9	2244.9	2253.5
7.5°	2147.7	2130.0	2163.0	2187.8	2205.7
10°	2074.2	2059.1	2101.9	2135.7	2160.6
12.5°	1989.2	1977.5	2029.3	2075.6	2107.4
15°	1849.5	1843.0	1908.2	1972.3	2014.5
17.5°	1699.9	1699.7	1774.1	1853.6	1904.4
20°	1597.2	1600.4	1680.2	1767.9	1827.4
22.5°	1494.5	1502.0	1587.2	1678.6	1746.8
25°	1341.5	1352.3	1447.8	1546.8	1619.3
27.5°	1194.5	1210.3	1310.7	1413.7	1502.0
30°	1098.0	1116.4	1218.6	1327.0	1417.9
32.5°	1003.2	1025.1	1124.8	1239.3	1332.0
35°	861.1	882.8	978.5	1093.6	1193.2
37.5°	714.4	735.6	829.0	942.4	1050.0
40°	618.7	642.5	731.6	841.5	950.8
42.5°	532.0	555.8	639.5	747.5	850.7
45°	412.9	437.7	511.4	610.9	706.2
47.5°	314.1	341.2	405.8	495.8	582.6
50°	255.7	282.7	346.4	425.8	509.1
52.5°	208.8	234.9	292.4	367.2	443.6
55°	148.3	173.2	223.6	287.1	353.1
57.5°	102.5	123.9	169.1	222.1	273.8
60°	74.2	94.7	137.2	180.3	222.5
62.5°	49.4	68.2	109.8	142.8	171.1
65°	16.6	31.8	70.8	85.4	95.2
67.5°	8.4	10.1	37.2	39.3	42.5
70°	6.6	6.6	17.7	18.9	22.1
72.5°	4.9	4.9	7.1	9.1	9.7
75°	2.2	2.2	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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)