

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

(formerly Eaton)

Brand: CORELITE

Report Number: P518310

Luminaire Tested: **SQ4-BB-025U-050D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518310
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-025U-050D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

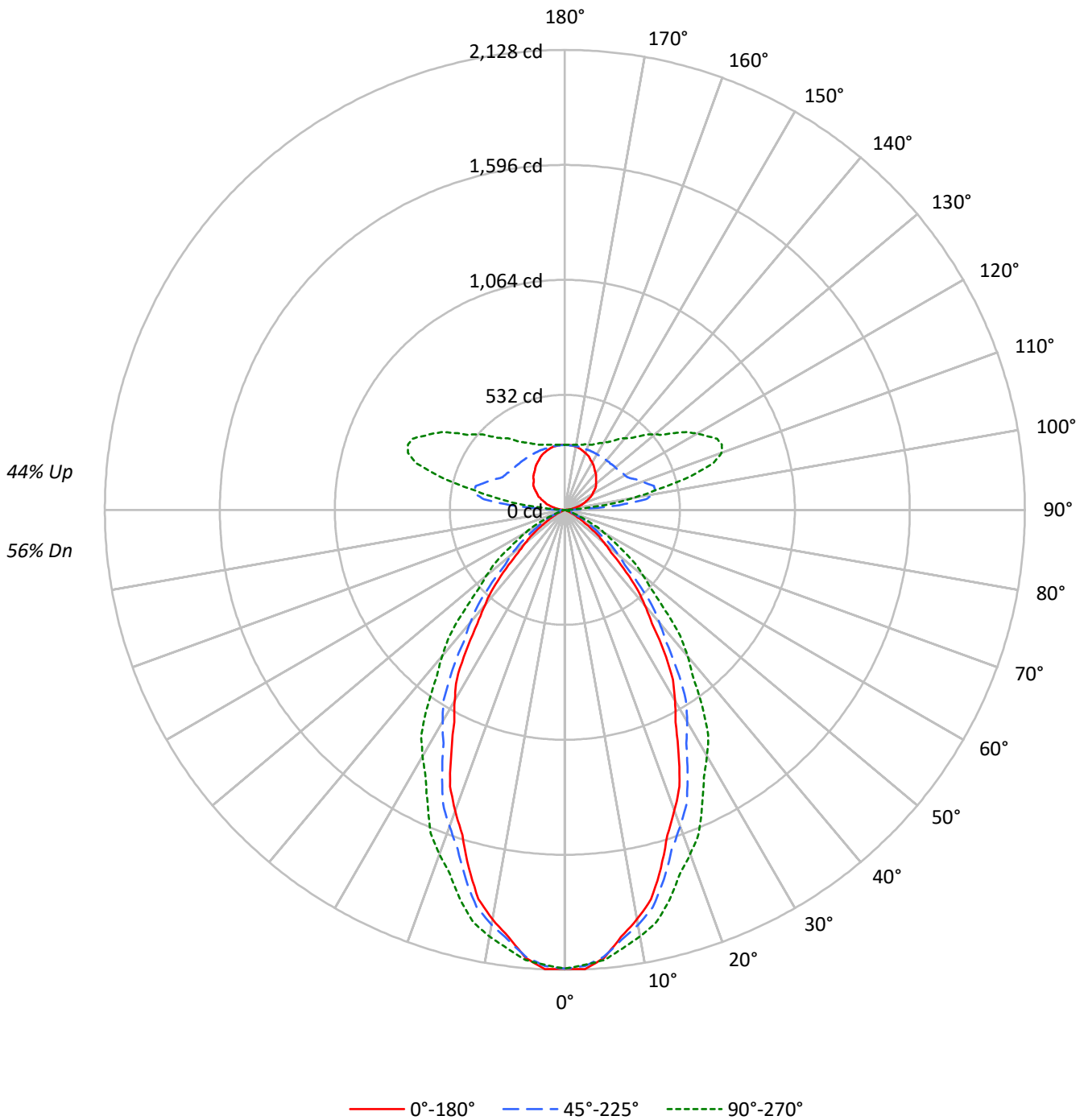
Lumens per Lamp: N/A
Luminaire Lumens: 4485.0 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 45.7
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									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	0																
RCR																																					
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56																			
1	101	98	94	92	94	91	89	86	79	77	76	68	67	66	58	57	56	52																			
2	94	88	83	78	87	82	78	74	72	69	66	62	60	58	54	52	51	47																			
3	87	79	73	68	81	74	69	64	65	61	58	57	54	52	49	47	46	42																			
4	81	71	65	59	75	67	61	57	60	55	51	52	49	46	46	43	41	38																			
5	75	65	58	53	70	61	55	50	55	50	46	48	45	42	42	40	37	35																			
6	70	59	52	47	65	56	50	45	50	45	41	44	41	38	39	36	34	32																			
7	65	54	47	42	61	51	45	41	46	41	37	41	37	34	37	34	31	29																			
8	61	50	43	38	57	47	41	37	43	38	34	38	34	31	34	31	29	27																			
9	57	46	39	35	54	44	38	34	40	35	31	36	32	29	32	29	27	25																			
10	54	43	36	32	51	41	35	31	37	32	29	33	29	27	30	27	25	23																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9792	9792	9792
5°	9634	9611	9682
10°	9014	9135	9390
15°	8195	8455	8926
20°	7274	7652	8323
25°	6335	6837	7647
30°	5426	6022	7007
35°	4499	5112	6234
40°	3457	4088	5312
45°	2499	3095	4274
50°	1702	2307	3390
55°	1107	1668	2635
60°	635	1174	1904
65°	168	717	964
70°	84	221	277
75°	37	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.7	4.3
10°-20°	495.4	11.0
20°-30°	620.2	13.8
30°-40°	572.8	12.8
40°-50°	384.9	8.6
50°-60°	198.8	4.4
60°-70°	62.3	1.4
70°-80°	3.9	0.1
80°-90°	1.7	0.0
90°-100°	146.7	3.3
100°-110°	385.7	8.6
110°-120°	400.0	8.9
120°-130°	320.8	7.2
130°-140°	251.7	5.6
140°-150°	193.2	4.3
150°-160°	139.2	3.1
160°-170°	85.1	1.9
170°-180°	28.8	0.6
0°-30°	1309.3	29.2
0°-40°	1882.1	42.0
0°-60°	2465.8	55.0
0°-90°	2533.7	56.5
90°-120°	932.4	20.8
90°-150°	1698.2	37.9
90°-180°	1951.0	43.5
0°-180°	4485.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2123	2123	2123	2123	2123	
5°	2080	2059	2075	2083	2091	193
15°	1716	1710	1770	1830	1869	478
25°	1245	1255	1343	1435	1502	571
35°	799	819	908	1015	1107	495
45°	383	406	474	567	655	301
55°	138	161	207	266	328	128
65°	15	30	66	79	88	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	6	15	8	8	2
95°	19	76	253	130	89	22
105°	70	105	426	647	604	74
115°	124	150	342	682	778	122
125°	172	192	311	525	620	152
135°	205	225	301	424	480	158
145°	237	252	297	362	390	149
155°	268	276	297	326	336	123
165°	290	293	297	309	313	82
175°	301	301	299	303	303	29
180°	301	301	301	301	301	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2122.6	2122.6	2122.6	2122.6	2122.6
2.5°	2127.5	2107.5	2112.8	2112.6	2107.0
5°	2080.5	2059.4	2075.4	2082.8	2090.8
7.5°	1992.6	1976.1	2006.8	2029.8	2046.4
10°	1924.4	1910.4	1950.1	1981.4	2004.5
12.5°	1845.6	1834.7	1882.7	1925.7	1955.2
15°	1716.0	1709.9	1770.4	1829.8	1869.0
17.5°	1577.1	1576.9	1645.9	1719.7	1766.9
20°	1481.8	1484.8	1558.8	1640.2	1695.4
22.5°	1386.5	1393.6	1472.6	1557.4	1620.7
25°	1244.6	1254.7	1343.2	1435.1	1502.4
27.5°	1108.2	1122.9	1216.1	1311.6	1393.5
30°	1018.7	1035.8	1130.6	1231.1	1315.5
32.5°	930.8	951.1	1043.5	1149.8	1235.8
35°	798.9	819.0	907.8	1014.6	1107.0
37.5°	662.8	682.4	769.2	874.3	974.1
40°	574.0	596.1	678.8	780.7	882.1
42.5°	493.5	515.6	593.3	693.5	789.3
45°	383.0	406.1	474.4	566.8	655.2
47.5°	291.4	316.5	376.5	460.0	540.6
50°	237.2	262.3	321.4	395.1	472.4
52.5°	193.7	218.0	271.3	340.7	411.6
55°	137.6	160.7	207.4	266.3	327.6
57.5°	95.1	115.0	156.9	206.1	254.1
60°	68.8	87.9	127.3	167.2	206.4
62.5°	45.8	63.3	101.9	132.5	158.8
65°	15.4	29.5	65.7	79.3	88.3
67.5°	7.8	9.4	34.5	36.4	39.4
70°	6.2	6.2	16.4	17.5	20.5
72.5°	4.5	4.5	6.6	8.4	9.0
75°	2.1	2.1	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	0.4	1.1	3.1	1.5	1.5
90°	1.9	5.7	15.4	7.7	7.7
92.5°	8.1	39.1	86.5	38.3	24.7
95°	19.3	75.9	252.8	130.3	88.8
97.5°	33.6	83.4	378.2	300.8	221.5
100°	44.4	89.7	416.8	422.4	328.1
102.5°	53.6	95.9	427.6	526.2	445.4
105°	69.5	105.3	426.5	647.4	604.0
107.5°	85.7	118.9	402.2	710.4	721.0
110°	96.5	126.7	382.1	726.6	771.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>107.3</i>	136.0	363.6	716.4	785.8
115°	<i>123.5</i>	149.9	341.6	681.5	777.7
117.5°	<i>139.3</i>	163.5	326.5	633.1	739.9
120°	<i>148.6</i>	171.2	320.3	600.6	704.4
122.5°	<i>157.9</i>	180.5	315.7	568.1	670.4
125°	<i>171.8</i>	192.5	310.7	525.1	619.5
127.5°	<i>182.9</i>	204.1	306.5	490.4	570.1
130°	<i>189.1</i>	211.8	304.9	468.7	542.3
132.5°	<i>195.3</i>	217.9	303.4	450.0	516.0
135°	<i>204.6</i>	225.3	301.0	423.9	480.5
137.5°	<i>214.2</i>	234.6	300.7	404.4	450.8
140°	<i>221.9</i>	240.8	299.1	388.9	432.3
142.5°	<i>228.1</i>	245.5	299.1	377.9	415.3
145°	<i>237.4</i>	252.5	297.2	361.5	389.8
147.5°	<i>246.6</i>	261.3	297.2	347.9	371.3
150°	<i>252.8</i>	266.0	297.2	340.1	358.9
152.5°	<i>259.0</i>	269.2	297.2	333.8	348.1
155°	<i>268.2</i>	275.8	297.2	326.4	335.8
157.5°	<i>275.2</i>	282.4	297.2	319.7	326.5
160°	<i>279.8</i>	285.5	297.2	316.6	320.3
162.5°	<i>284.5</i>	288.6	297.2	313.5	317.3
165°	<i>289.5</i>	293.2	297.2	308.9	312.6
167.5°	<i>294.1</i>	296.0	299.1	306.9	308.4
170°	<i>297.2</i>	299.1	299.1	306.8	306.8
172.5°	<i>298.7</i>	299.1	299.1	305.3	303.8
175°	<i>301.0</i>	301.0	299.1	303.0	303.0
177.5°	<i>301.0</i>	301.0	299.5	302.6	301.0
180°	<i>301.0</i>	301.0	301.0	301.0	301.0

(END OF REPORT)