

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: P518549

Luminaire Tested: **SQ4-BB-075U-100D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518549
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-100D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

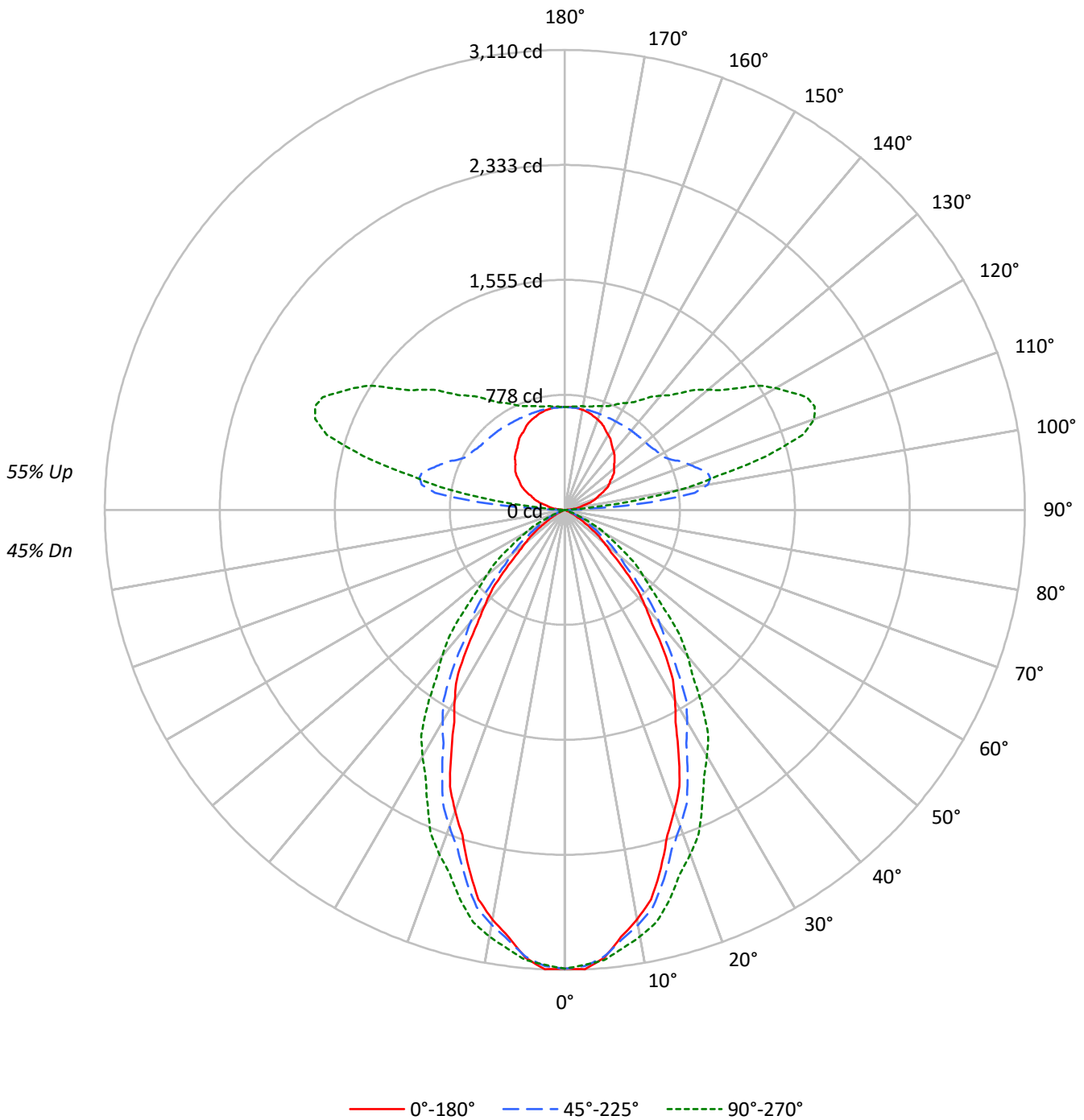
Lumens per Lamp: N/A
Luminaire Lumens: 8238.8 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 82.9
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	81	81	81	65	65	65	51	51	51	45
1	98	95	91	88	90	87	84	82	73	71	69	60	59	58	48	47	47	41
2	91	84	79	75	83	78	74	70	66	63	60	55	53	51	44	43	42	37
3	84	76	69	64	77	70	65	60	60	56	52	50	47	45	41	39	38	33
4	78	68	61	56	71	63	57	53	54	50	46	46	42	40	38	36	34	30
5	72	62	55	49	66	57	51	46	49	45	41	42	38	36	35	32	31	28
6	67	56	49	44	62	52	46	41	45	40	37	38	35	32	32	30	28	25
7	62	51	44	39	57	48	42	37	41	37	33	36	32	29	30	27	26	23
8	58	47	40	35	54	44	38	33	38	33	30	33	29	27	28	25	23	21
9	54	43	36	32	50	41	34	30	35	31	27	31	27	25	26	24	22	20
10	51	40	33	29	47	38	32	28	33	28	25	29	25	23	24	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19083	19083	19083
5°	18777	18730	18869
10°	17568	17803	18300
15°	15972	16479	17396
20°	14178	14915	16221
25°	12347	13325	14904
30°	10575	11737	13656
35°	8769	9963	12150
40°	6737	7967	10353
45°	4870	6032	8331
50°	3318	4495	6607
55°	2157	3251	5134
60°	1238	2289	3711
65°	327	1399	1879
70°	162	432	540
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.2	3.4
10°-20°	724.1	8.8
20°-30°	906.5	11.0
30°-40°	837.3	10.2
40°-50°	562.6	6.8
50°-60°	290.6	3.5
60°-70°	91.0	1.1
70°-80°	5.7	0.1
80°-90°	1.9	0.0
90°-100°	328.4	4.0
100°-110°	903.5	11.0
110°-120°	932.6	11.3
120°-130°	747.2	9.1
130°-140°	586.8	7.1
140°-150°	449.7	5.5
150°-160°	323.3	3.9
160°-170°	197.7	2.4
170°-180°	66.6	0.8
0°-30°	1913.8	23.2
0°-40°	2751.1	33.4
0°-60°	3604.3	43.7
0°-90°	3703.0	44.9
90°-120°	2164.4	26.3
90°-150°	3948.2	47.9
90°-180°	4536.0	55.1
0°-180°	8238.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3103	3103	3103	3103	3103	
5°	3041	3010	3034	3044	3056	282
15°	2508	2499	2588	2675	2732	699
25°	1819	1834	1963	2098	2196	834
35°	1168	1197	1327	1483	1618	723
45°	560	594	694	828	958	440
55°	201	235	303	389	479	188
65°	22	43	96	116	129	38
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
90°	2	6	10	13	13	3
95°	49	179	581	248	158	52
105°	162	248	996	1516	1415	170
115°	286	348	798	1590	1804	282
125°	394	449	724	1226	1436	352
135°	476	528	704	991	1121	367
145°	550	587	693	844	910	345
155°	622	642	689	759	781	286
165°	673	681	692	720	724	190
175°	696	698	693	702	701	66
180°	696	696	696	696	696	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3102.6	3102.6	3102.6	3102.6	3102.6
2.5°	3109.8	3080.5	3088.2	3088.0	3079.8
5°	3041.1	3010.3	3033.6	3044.4	3056.1
7.5°	2912.6	2888.5	2933.3	2966.9	2991.3
10°	2812.9	2792.4	2850.5	2896.3	2930.0
12.5°	2697.7	2681.8	2752.0	2814.8	2858.0
15°	2508.2	2499.4	2587.8	2674.6	2731.9
17.5°	2305.3	2305.0	2405.9	2513.7	2582.7
20°	2166.0	2170.4	2278.6	2397.5	2478.2
22.5°	2026.7	2037.0	2152.5	2276.5	2368.9
25°	1819.3	1833.9	1963.4	2097.7	2196.0
27.5°	1619.9	1641.3	1777.5	1917.1	2036.9
30°	1489.0	1514.0	1652.6	1799.5	1922.8
32.5°	1360.5	1390.2	1525.3	1680.7	1806.3
35°	1167.8	1197.2	1326.9	1483.1	1618.1
37.5°	968.8	997.5	1124.3	1278.0	1423.9
40°	839.1	871.4	992.2	1141.2	1289.4
42.5°	721.4	753.7	867.3	1013.7	1153.7
45°	559.9	593.6	693.5	828.5	957.7
47.5°	426.0	462.7	550.3	672.4	790.1
50°	346.7	383.4	469.8	577.5	690.5
52.5°	283.1	318.6	396.6	498.0	601.6
55°	201.1	234.9	303.2	389.3	478.8
57.5°	139.0	168.1	229.4	301.2	371.4
60°	100.6	128.5	186.1	244.5	301.7
62.5°	66.9	92.5	148.9	193.6	232.1
65°	22.5	43.1	96.1	115.9	129.1
67.5°	11.4	13.8	50.4	53.2	57.6
70°	9.0	9.0	24.0	25.6	30.0
72.5°	6.6	6.6	9.6	12.3	13.2
75°	3.0	3.0	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.2	2.1	2.7	2.7
90°	1.5	5.8	10.4	13.3	13.3
92.5°	20.4	87.4	151.4	58.1	47.7
95°	48.9	179.3	580.7	248.3	158.5
97.5°	79.7	198.8	886.2	682.8	481.8
100°	102.2	210.9	982.2	991.4	808.8
102.5°	123.5	225.2	1007.1	1229.9	1062.5
105°	161.5	248.4	995.5	1516.1	1414.7
107.5°	197.6	277.0	938.9	1656.3	1686.4
110°	223.7	296.1	896.3	1691.2	1795.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	247.4	317.5	853.6	1668.7	1827.5
115°	285.9	348.2	798.5	1590.0	1804.4
117.5°	322.7	380.0	763.5	1479.5	1722.0
120°	345.2	400.2	748.1	1396.7	1647.3
122.5°	365.3	420.4	737.4	1324.2	1562.0
125°	394.1	449.1	724.4	1225.5	1435.5
127.5°	421.3	473.7	715.8	1143.1	1327.3
130°	435.5	489.1	711.1	1094.1	1262.2
132.5°	452.1	505.7	707.5	1051.1	1202.9
135°	475.5	527.7	703.7	991.1	1121.4
137.5°	497.5	545.8	700.4	942.5	1050.0
140°	514.0	559.0	699.2	910.3	1007.4
142.5°	528.3	569.7	696.9	881.5	964.7
145°	549.6	587.3	693.3	844.4	909.6
147.5°	572.4	604.9	691.5	811.5	863.7
150°	586.6	615.6	690.3	793.5	834.0
152.5°	599.7	626.3	689.2	777.9	811.5
155°	622.2	642.5	688.9	759.0	780.7
157.5°	638.5	655.0	688.9	743.4	758.5
160°	650.3	663.4	688.9	735.0	746.6
162.5°	659.8	670.5	690.0	727.9	737.1
165°	672.6	681.2	691.8	720.1	724.4
167.5°	681.4	688.1	693.3	713.5	714.6
170°	687.4	691.7	693.3	711.1	711.1
172.5°	692.1	694.1	693.3	707.5	706.3
175°	696.3	697.7	693.3	702.2	700.7
177.5°	697.4	697.4	692.7	699.8	697.4
180°	696.3	696.3	696.3	696.3	696.3

(END OF REPORT)