

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: P518837

Luminaire Tested: **SQ4-BB-125U-100D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518837
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-100D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

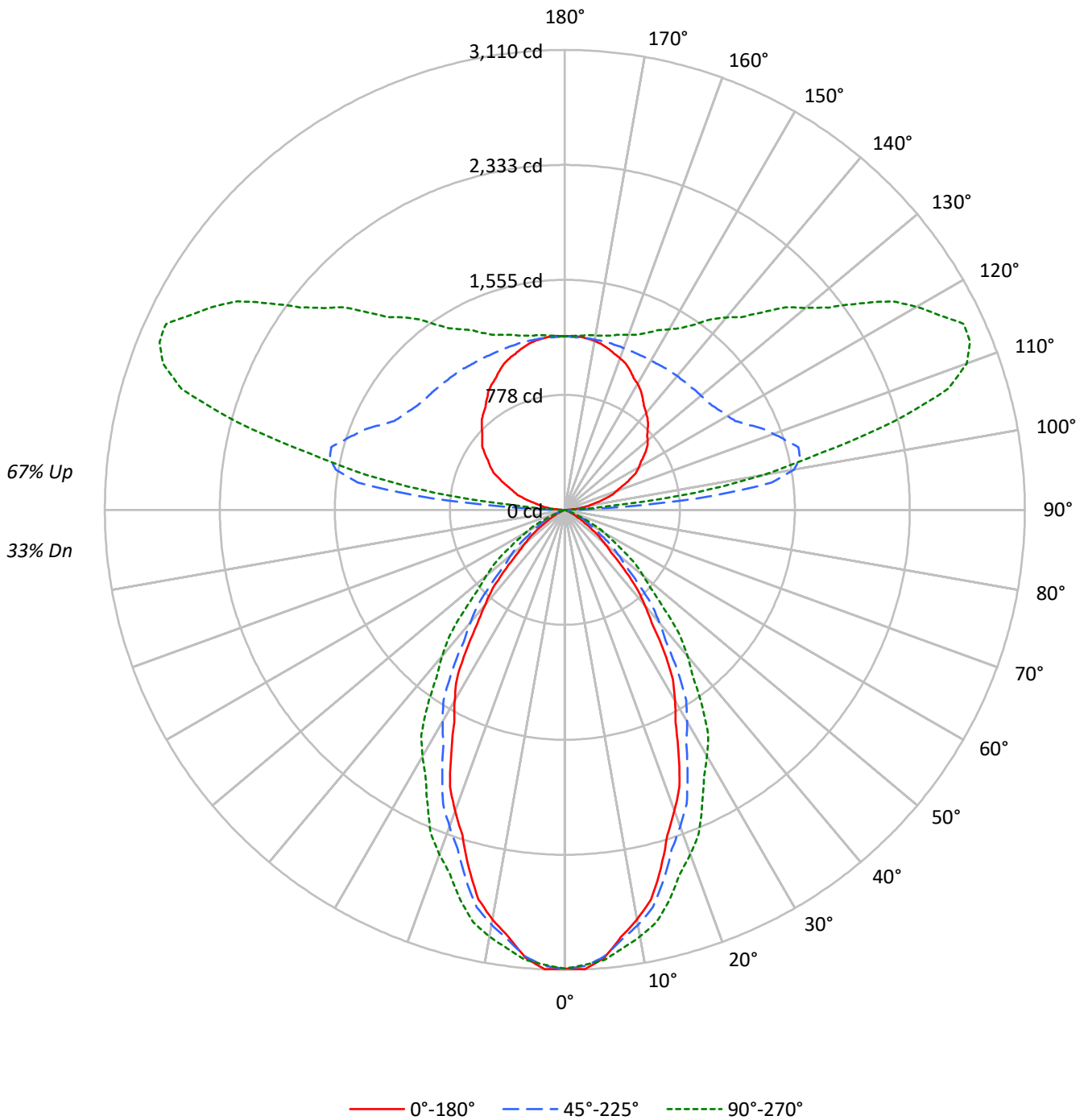
Lumens per Lamp: N/A
Luminaire Lumens: 11278.4 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 102.8
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	95	91	88	85	86	83	80	77	66	64	63	51	50	49	37	37	36	30
2	88	81	76	71	79	74	69	65	59	56	54	46	45	43	34	33	32	27
3	81	72	66	61	73	66	60	56	54	50	47	42	40	38	32	30	29	24
4	74	65	58	53	67	59	53	49	48	44	41	38	36	33	29	27	26	22
5	69	58	51	46	62	53	47	42	44	39	36	35	32	30	27	25	24	20
6	64	53	45	40	58	48	42	38	40	35	32	32	29	27	25	23	21	18
7	59	48	41	36	53	44	38	33	37	32	29	30	26	24	23	21	20	17
8	55	44	37	32	50	40	34	30	34	29	26	27	24	22	21	19	18	15
9	51	40	33	29	47	37	31	27	31	27	23	25	22	20	20	18	16	14
10	48	37	30	26	44	34	28	24	29	24	21	24	20	18	19	17	15	13

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	2.5
10°-20°	724.1	6.4
20°-30°	906.5	8.0
30°-40°	837.3	7.4
40°-50°	562.6	5.0
50°-60°	290.6	2.6
60°-70°	91.0	0.8
70°-80°	5.7	0.1
80°-90°	2.9	0.0
90°-100°	548.9	4.9
100°-110°	1478.5	13.1
110°-120°	1551.7	13.8
120°-130°	1259.2	11.2
130°-140°	987.5	8.8
140°-150°	758.2	6.7
150°-160°	545.1	4.8
160°-170°	333.0	3.0
170°-180°	112.3	1.0
0°-30°	1913.8	17.0
0°-40°	2751.1	24.4
0°-60°	3604.3	32.0
0°-90°	3703.9	32.8
90°-120°	3579.1	31.7
90°-150°	6584.0	58.4
90°-180°	7574.0	67.2
0°-180°	11278.4	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°	3	9	18	19	19	6
95°	84	298	900	460	318	87
105°	274	426	1635	2446	2296	288
115°	483	591	1362	2631	2976	475
125°	659	757	1223	2066	2432	589
135°	794	886	1188	1667	1888	613
145°	918	989	1173	1425	1530	576
155°	1042	1080	1163	1279	1320	480
165°	1130	1143	1167	1214	1220	319
175°	1175	1173	1169	1185	1182	112
180°	1173	1173	1173	1173	1173	



TEST NUMBER: P518837

CATALOG NUMBER: SQ4-BB-125U-100D-840-1D-UNV-STD-W-6

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°	0.6	1.8	3.6	3.9	3.9
90°	3.0	8.8	17.9	19.4	19.4
92.5°	36.5	128.8	254.7	122.6	85.2
95°	83.7	298.5	899.8	460.1	318.4
97.5°	133.6	341.7	1411.3	1179.0	889.0
100°	171.9	359.0	1573.9	1646.7	1366.1
102.5°	209.0	383.2	1627.7	1997.0	1766.7
105°	273.5	425.5	1635.2	2446.3	2295.8
107.5°	334.5	470.1	1565.5	2677.2	2716.1
110°	375.2	503.8	1502.1	2748.9	2890.7

TEST NUMBER: P518837

CATALOG NUMBER: SQ4-BB-125U-100D-840-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	418.2	537.5	1441.2	2733.1	2966.0
115°	482.8	590.9	1361.6	2631.0	2975.9
117.5°	541.7	643.1	1300.1	2468.1	2852.1
120°	579.9	677.8	1269.0	2351.1	2745.7
122.5°	613.4	710.2	1246.3	2231.5	2624.9
125°	659.1	757.1	1222.6	2066.5	2431.8
127.5°	703.1	799.5	1207.7	1920.9	2247.1
130°	729.4	825.9	1201.7	1837.5	2123.9
132.5°	755.7	851.0	1195.7	1764.0	2027.1
135°	793.7	885.7	1188.3	1667.1	1887.8
137.5°	829.8	918.1	1184.4	1584.9	1766.1
140°	855.0	939.7	1180.8	1534.3	1697.9
142.5°	881.3	960.2	1178.4	1487.0	1625.0
145°	917.7	989.3	1173.3	1425.3	1530.5
147.5°	957.2	1019.4	1168.2	1373.4	1456.1
150°	983.5	1037.6	1165.8	1340.8	1409.5
152.5°	1007.4	1054.5	1164.6	1314.2	1370.0
155°	1041.8	1079.8	1162.9	1278.9	1319.8
157.5°	1072.0	1101.5	1163.2	1254.1	1281.5
160°	1091.1	1116.0	1164.3	1239.5	1260.0
162.5°	1107.8	1128.0	1165.5	1227.5	1242.1
165°	1130.0	1143.1	1167.3	1213.8	1219.7
167.5°	1147.9	1155.5	1168.8	1203.3	1205.6
170°	1159.9	1162.8	1168.8	1197.2	1197.2
172.5°	1167.0	1167.6	1170.0	1191.3	1191.3
175°	1174.8	1173.3	1168.8	1185.2	1182.3
177.5°	1178.1	1175.8	1169.7	1179.2	1176.9
180°	1173.3	1173.3	1173.3	1173.3	1173.3

(END OF REPORT)