

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: P518829

Luminaire Tested: **SQ4-BB-125U-100D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518829
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-830-1D-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10539.5 lumens
Efficiency: N/A
Efficacy: 102.5 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

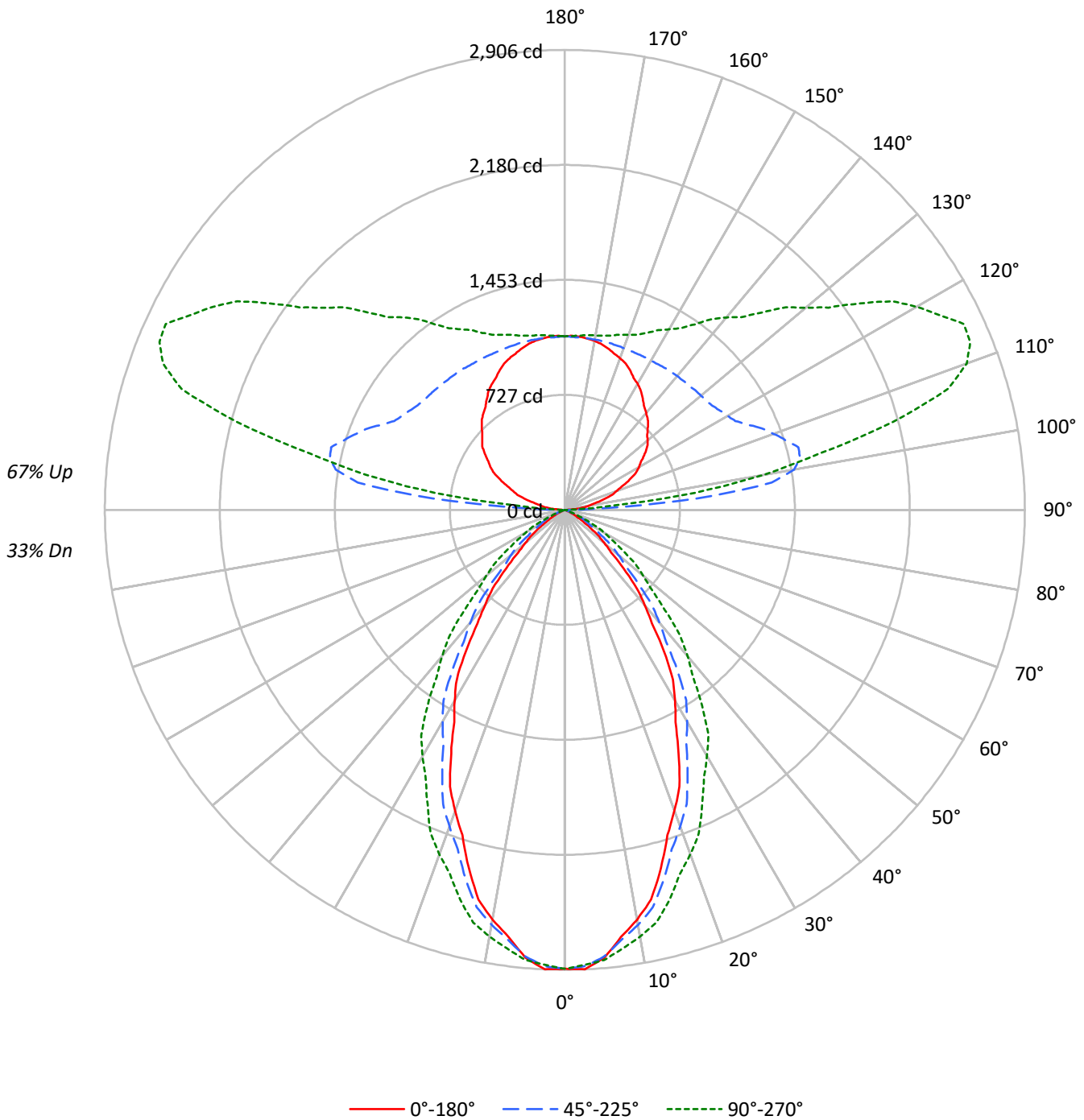
Input Watts (W): 102.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	17834	17834	17834
5°	17547	17504	17633
10°	16418	16637	17101
15°	14925	15399	16256
20°	13249	13937	15159
25°	11538	12451	13927
30°	9883	10969	12762
35°	8194	9311	11354
40°	6296	7445	9675
45°	4551	5637	7784
50°	3100	4201	6174
55°	2016	3038	4799
60°	1156	2139	3468
65°	306	1307	1755
70°	151	403	505
75°	67	33	0
80°	50	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.6	2.5
10°-20°	676.7	6.4
20°-30°	847.1	8.0
30°-40°	782.5	7.4
40°-50°	525.8	5.0
50°-60°	271.6	2.6
60°-70°	85.0	0.8
70°-80°	5.4	0.1
80°-90°	2.7	0.0
90°-100°	512.9	4.9
100°-110°	1381.7	13.1
110°-120°	1450.0	13.8
120°-130°	1176.7	11.2
130°-140°	922.8	8.8
140°-150°	708.5	6.7
150°-160°	509.4	4.8
160°-170°	311.2	3.0
170°-180°	105.0	1.0
0°-30°	1788.4	17.0
0°-40°	2570.8	24.4
0°-60°	3368.2	32.0
0°-90°	3461.3	32.8
90°-120°	3344.6	31.7
90°-150°	6152.6	58.4
90°-180°	7078.0	67.2
0°-180°	10539.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2899	2899	2899	2899	2899	
5°	2842	2813	2835	2845	2856	263
15°	2344	2336	2418	2499	2553	653
25°	1700	1714	1835	1960	2052	779
35°	1091	1119	1240	1386	1512	676
45°	523	555	648	774	895	411
55°	188	220	283	364	448	175
65°	21	40	90	108	121	36
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	3	8	17	18	18	6
95°	78	279	841	430	298	82
105°	256	398	1528	2286	2145	269
115°	451	552	1272	2459	2781	444
125°	616	708	1142	1931	2272	550
135°	742	828	1110	1558	1764	572
145°	858	924	1096	1332	1430	538
155°	974	1009	1087	1195	1233	448
165°	1056	1068	1091	1134	1140	298
175°	1098	1096	1092	1108	1105	104
180°	1096	1096	1096	1096	1096	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2899.4	2899.4	2899.4	2899.4	2899.4
2.5°	2906.1	2878.7	2885.9	2885.7	2878.1
5°	2841.9	2813.1	2834.9	2844.9	2855.9
7.5°	2721.8	2699.3	2741.2	2772.5	2795.3
10°	2628.7	2609.5	2663.7	2706.5	2738.1
12.5°	2520.9	2506.1	2571.7	2630.4	2670.7
15°	2343.9	2335.7	2418.3	2499.4	2552.9
17.5°	2154.3	2154.0	2248.2	2349.0	2413.5
20°	2024.1	2028.2	2129.3	2240.4	2315.9
22.5°	1893.9	1903.5	2011.5	2127.3	2213.7
25°	1700.1	1713.8	1834.7	1960.3	2052.1
27.5°	1513.8	1533.8	1661.1	1791.5	1903.5
30°	1391.5	1414.8	1544.4	1681.6	1796.9
32.5°	1271.4	1299.1	1425.4	1570.6	1688.0
35°	1091.3	1118.7	1240.0	1385.9	1512.1
37.5°	905.3	932.2	1050.6	1194.3	1330.6
40°	784.1	814.3	927.2	1066.4	1204.9
42.5°	674.1	704.3	810.5	947.3	1078.1
45°	523.2	554.8	648.0	774.2	894.9
47.5°	398.1	432.4	514.2	628.4	738.4
50°	324.0	358.3	439.0	539.6	645.2
52.5°	264.5	297.7	370.6	465.4	562.2
55°	188.0	219.5	283.3	363.8	447.5
57.5°	129.9	157.0	214.3	281.5	347.0
60°	94.0	120.0	173.9	228.5	281.9
62.5°	62.6	86.4	139.1	180.9	216.9
65°	21.0	40.2	89.8	108.3	120.6
67.5°	10.7	12.9	47.1	49.7	53.9
70°	8.4	8.4	22.4	23.9	28.1
72.5°	6.2	6.2	9.0	11.5	12.3
75°	2.8	2.8	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	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	1.7	3.4	3.6	3.6
90°	2.8	8.3	16.8	18.2	18.2
92.5°	34.1	120.4	238.0	114.6	79.6
95°	78.2	279.0	840.8	430.0	297.5
97.5°	124.9	319.3	1318.8	1101.7	830.8
100°	160.6	335.4	1470.8	1538.8	1276.6
102.5°	195.3	358.1	1521.1	1866.2	1651.0
105°	255.6	397.6	1528.0	2286.1	2145.4
107.5°	312.6	439.3	1463.0	2501.9	2538.2
110°	350.6	470.8	1403.7	2568.8	2701.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	390.8	502.3	1346.7	2554.0	2771.7
115°	451.2	552.2	1272.4	2458.6	2780.9
117.5°	506.2	601.0	1214.9	2306.4	2665.3
120°	541.9	633.4	1185.8	2197.1	2565.8
122.5°	573.2	663.6	1164.6	2085.3	2453.0
125°	616.0	707.5	1142.5	1931.1	2272.5
127.5°	657.0	747.2	1128.6	1795.1	2099.9
130°	681.6	771.8	1123.0	1717.1	1984.8
132.5°	706.2	795.2	1117.4	1648.4	1894.3
135°	741.7	827.7	1110.4	1557.9	1764.1
137.5°	775.5	858.0	1106.8	1481.1	1650.4
140°	798.9	878.2	1103.4	1433.8	1586.7
142.5°	823.5	897.3	1101.2	1389.6	1518.5
145°	857.6	924.5	1096.5	1331.9	1430.3
147.5°	894.5	952.7	1091.7	1283.4	1360.7
150°	919.1	969.6	1089.5	1252.9	1317.1
152.5°	941.4	985.4	1088.3	1228.1	1280.3
155°	973.5	1009.0	1086.7	1195.1	1233.3
157.5°	1001.8	1029.3	1087.0	1171.9	1197.6
160°	1019.6	1042.8	1088.1	1158.3	1177.5
162.5°	1035.3	1054.1	1089.2	1147.0	1160.7
165°	1055.9	1068.2	1090.9	1134.3	1139.8
167.5°	1072.7	1079.8	1092.3	1124.4	1126.6
170°	1083.9	1086.6	1092.3	1118.8	1118.8
172.5°	1090.6	1091.1	1093.4	1113.2	1113.2
175°	1097.8	1096.5	1092.3	1107.6	1104.8
177.5°	1100.9	1098.7	1093.1	1102.0	1099.8
180°	1096.5	1096.5	1096.5	1096.5	1096.5

(END OF REPORT)