

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: P518948

Luminaire Tested: **SQ4-BB-150U-125D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518948
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-125D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

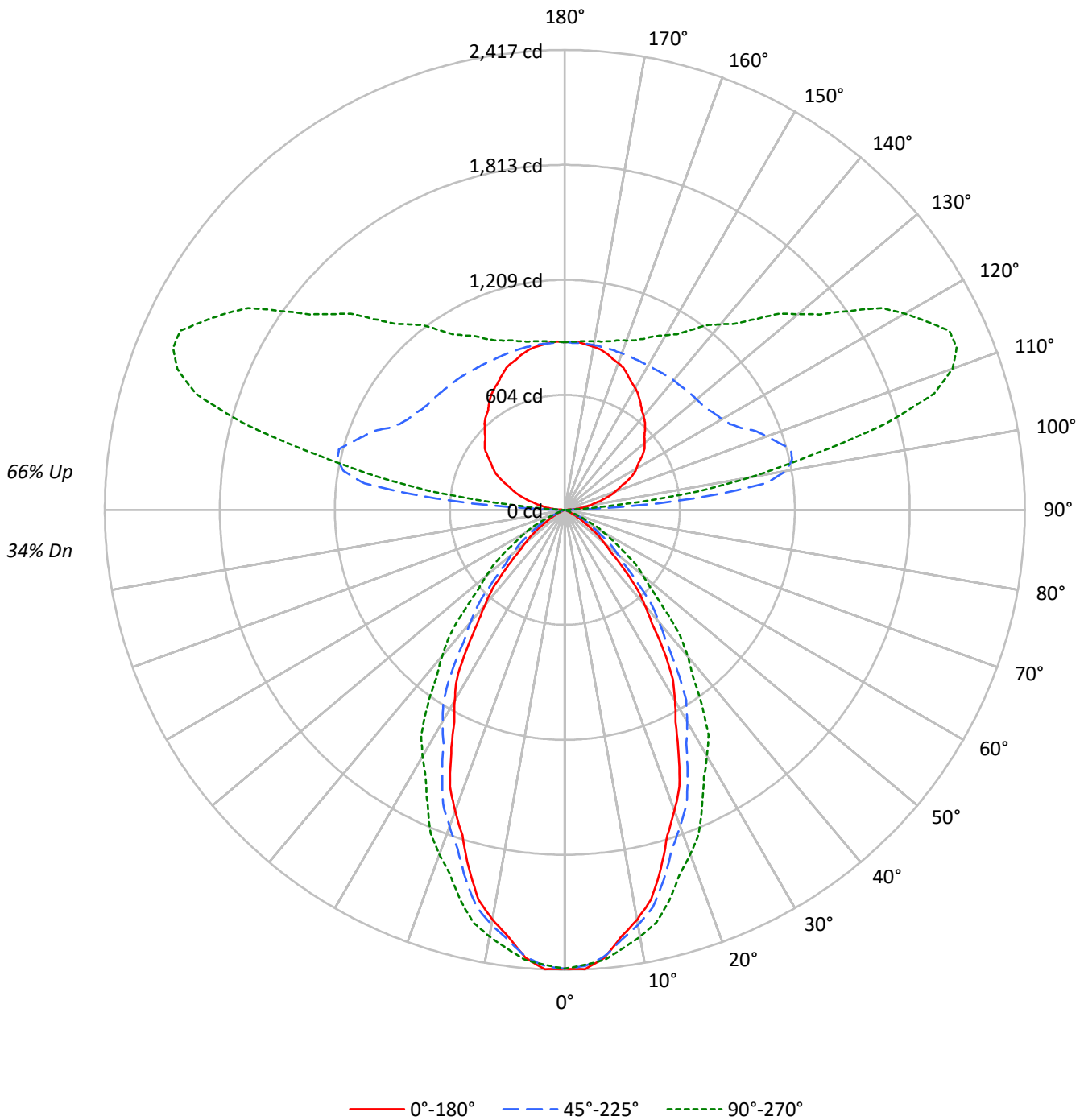
Lumens per Lamp: N/A
Luminaire Lumens: 8564.4 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 83.1
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	57	57	57	41	41	41	34
1	95	92	88	85	86	83	80	78	67	65	63	52	51	50	38	37	37	31
2	88	81	76	72	79	74	69	66	60	57	54	47	45	43	35	34	33	28
3	81	73	66	61	73	66	61	56	54	50	47	43	40	38	32	31	30	25
4	75	65	58	53	67	59	53	49	49	45	41	39	36	34	30	28	27	23
5	69	59	51	46	62	54	47	43	44	40	36	35	32	30	27	26	24	21
6	64	53	46	40	58	49	42	38	40	36	32	33	29	27	25	23	22	19
7	59	48	41	36	54	44	38	34	37	32	29	30	27	24	23	21	20	17
8	55	44	37	32	50	41	34	30	34	29	26	28	25	22	22	20	18	16
9	52	40	34	29	47	37	31	27	31	27	24	26	23	20	20	18	17	15
10	48	37	31	26	44	34	29	25	29	25	22	24	21	19	19	17	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22248	22248	22248
5°	21890	21837	21999
10°	20482	20755	21335
15°	18620	19211	20281
20°	16528	17387	18911
25°	14395	15535	17375
30°	12329	13684	15922
35°	10222	11616	14164
40°	7854	9287	12069
45°	5678	7033	9711
50°	3868	5242	7703
55°	2514	3791	5987
60°	1443	2670	4327
65°	382	1631	2190
70°	189	504	629
75°	82	43	0
80°	64	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.1	2.6
10°-20°	562.8	6.6
20°-30°	704.6	8.2
30°-40°	650.8	7.6
40°-50°	437.3	5.1
50°-60°	225.9	2.6
60°-70°	70.8	0.8
70°-80°	4.5	0.1
80°-90°	1.9	0.0
90°-100°	409.8	4.8
100°-110°	1108.2	12.9
110°-120°	1165.1	13.6
120°-130°	946.4	11.0
130°-140°	742.3	8.7
140°-150°	569.7	6.7
150°-160°	409.7	4.8
160°-170°	250.3	2.9
170°-180°	84.4	1.0
0°-30°	1487.4	17.4
0°-40°	2138.2	25.0
0°-60°	2801.3	32.7
0°-90°	2878.5	33.6
90°-120°	2683.1	31.3
90°-150°	4941.5	57.7
90°-180°	5686.0	66.4
0°-180°	8564.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2411	2411	2411	2411	2411	
5°	2364	2340	2358	2366	2375	219
15°	1949	1943	2011	2079	2123	543
25°	1414	1425	1526	1630	1707	648
35°	908	930	1031	1153	1258	562
45°	435	461	539	644	744	342
55°	156	183	236	303	372	146
65°	18	34	75	90	100	30
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	6	12	13	12	4
95°	64	223	682	353	210	67
105°	206	318	1229	1813	1739	217
115°	363	443	1020	1974	2228	358
125°	496	569	919	1551	1822	443
135°	595	666	894	1252	1417	460
145°	692	744	882	1072	1153	433
155°	781	812	874	961	993	360
165°	851	859	878	912	917	240
175°	883	882	879	890	888	84
180°	882	882	882	882	882	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2411.4	2411.4	2411.4	2411.4	2411.4
2.5°	2417.0	2394.2	2400.2	2400.1	2393.7
5°	2363.6	2339.6	2357.8	2366.1	2375.3
7.5°	2263.7	2245.0	2279.8	2305.9	2324.9
10°	2186.3	2170.3	2215.4	2251.0	2277.3
12.5°	2096.7	2084.4	2138.9	2187.7	2221.3
15°	1949.4	1942.6	2011.3	2078.8	2123.3
17.5°	1791.7	1791.5	1869.9	1953.7	2007.3
20°	1683.4	1686.9	1770.9	1863.4	1926.1
22.5°	1575.2	1583.2	1672.9	1769.3	1841.2
25°	1414.0	1425.4	1526.0	1630.4	1706.8
27.5°	1259.0	1275.7	1381.5	1490.0	1583.1
30°	1157.3	1176.7	1284.5	1398.6	1494.5
32.5°	1057.4	1080.5	1185.5	1306.3	1403.9
35°	907.6	930.5	1031.3	1152.7	1257.6
37.5°	752.9	775.3	873.8	993.3	1106.7
40°	652.1	677.2	771.1	886.9	1002.1
42.5°	560.7	585.8	674.1	787.8	896.7
45°	435.2	461.4	539.0	643.9	744.3
47.5°	331.1	359.6	427.7	522.6	614.1
50°	269.5	298.0	365.2	448.8	536.7
52.5°	220.0	247.6	308.2	387.1	467.6
55°	156.3	182.6	235.7	302.6	372.2
57.5°	108.0	130.6	178.3	234.1	288.6
60°	78.2	99.8	144.7	190.0	234.5
62.5°	52.0	71.9	115.7	150.5	180.4
65°	17.5	33.5	74.7	90.1	100.3
67.5°	8.9	10.7	39.2	41.4	44.8
70°	7.0	7.0	18.7	19.9	23.3
72.5°	5.1	5.1	7.5	9.6	10.3
75°	2.3	2.3	1.2	0.0	0.0
77.5°	1.2	1.2	0.9	0.0	0.0
80°	1.2	1.2	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	2.5	2.7	2.5
90°	1.9	5.6	12.3	13.3	12.3
92.5°	27.0	98.2	193.8	84.2	60.9
95°	63.6	223.3	681.6	352.7	209.8
97.5°	102.1	256.0	1062.5	879.3	645.7
100°	131.0	269.3	1180.9	1231.6	995.8
102.5°	157.6	287.7	1222.7	1498.7	1322.4
105°	206.0	318.3	1229.3	1813.4	1739.1
107.5°	250.8	353.3	1175.6	2009.7	2034.4
110°	285.7	378.6	1127.8	2062.4	2167.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	316.9	403.8	1083.7	2051.8	2228.0
115°	362.6	443.4	1019.6	1973.7	2228.0
117.5°	407.4	483.2	977.2	1854.3	2142.6
120°	434.8	509.0	952.2	1768.6	2062.8
122.5°	460.6	533.4	937.0	1676.8	1973.2
125°	496.5	568.9	918.9	1550.7	1821.7
127.5°	529.5	600.6	908.3	1447.8	1686.2
130°	547.7	621.1	903.7	1384.2	1599.6
132.5°	566.7	639.3	899.2	1326.9	1525.2
135°	595.2	665.8	894.2	1252.1	1417.3
137.5°	623.9	690.5	890.1	1191.4	1326.0
140°	643.6	705.8	888.5	1152.3	1272.1
142.5°	662.6	721.1	885.5	1117.1	1221.9
145°	692.0	744.0	881.9	1071.7	1153.4
147.5°	718.8	764.9	877.7	1030.7	1093.4
150°	738.6	779.4	876.2	1008.4	1058.5
152.5°	756.8	792.4	875.4	987.6	1028.9
155°	781.3	811.9	874.3	961.4	993.0
157.5°	806.7	828.1	874.5	943.1	963.9
160°	821.1	838.8	875.3	931.6	946.5
162.5°	832.5	847.2	876.0	922.4	933.5
165°	850.6	858.9	878.1	912.4	917.0
167.5°	862.9	868.7	878.3	903.8	906.0
170°	870.5	873.3	879.1	899.9	899.9
172.5°	876.6	877.1	879.1	895.4	894.6
175°	882.9	881.9	879.1	890.4	888.5
177.5°	884.9	882.7	878.9	886.4	884.2
180°	881.9	881.9	881.9	881.9	881.9

(END OF REPORT)