

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: P518889

Luminaire Tested: **SQ4-BB-150U-050D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518889
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-050D-930-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

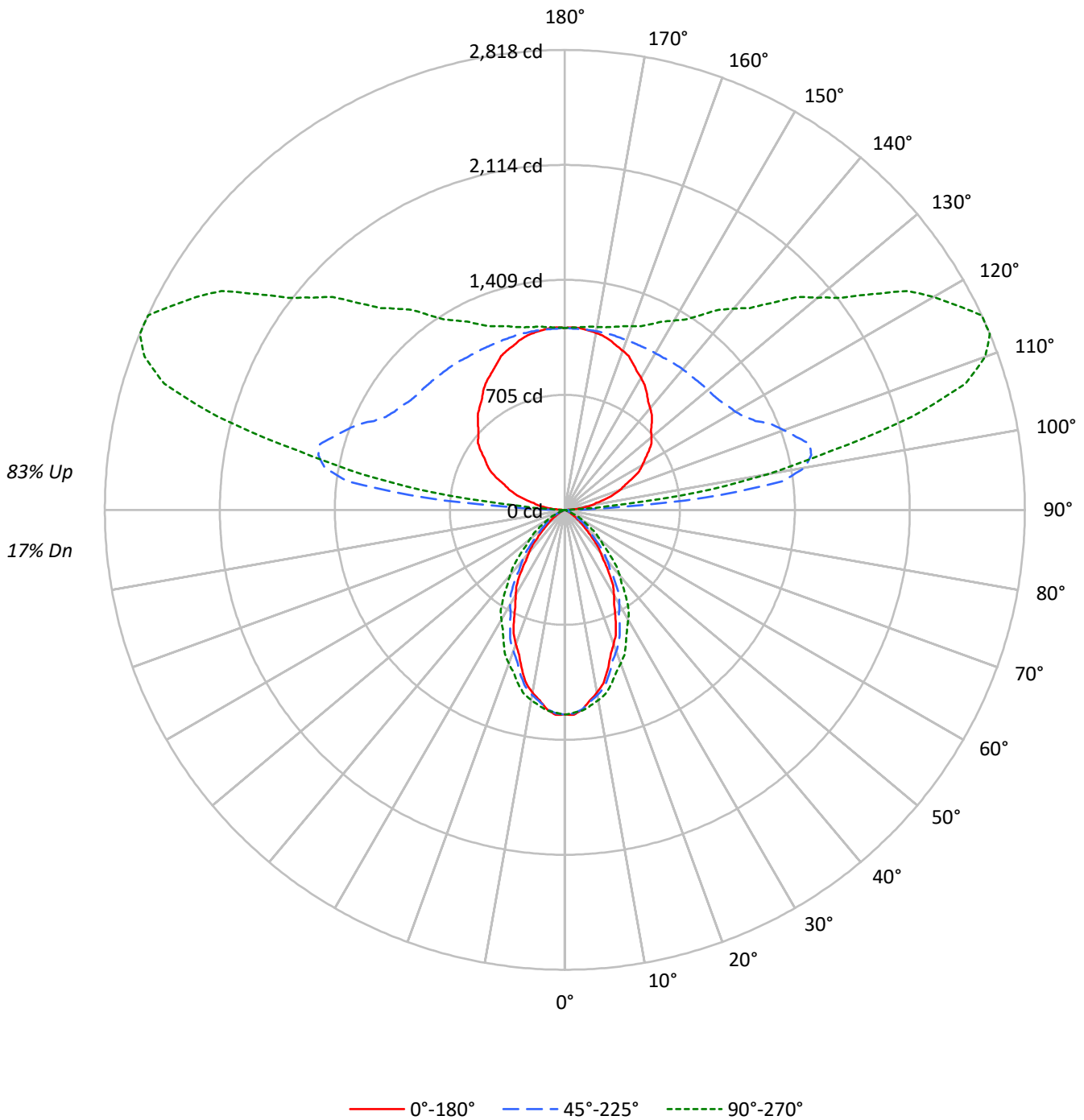
Lumens per Lamp: N/A
Luminaire Lumens: 8688.9 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.1
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									
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	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26	17																			
1	91	87	84	81	80	77	74	72	58	56	54	40	39	38	24	23	23	16																			
2	83	77	71	67	73	68	63	60	51	48	46	36	34	33	22	21	20	14																			
3	76	68	61	56	67	60	55	51	46	42	39	32	30	29	20	19	18	13																			
4	70	60	53	48	62	54	48	43	41	37	34	29	27	25	18	17	16	12																			
5	64	54	47	41	57	48	42	37	37	33	30	26	24	22	17	15	14	11																			
6	59	48	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13	10																			
7	55	44	37	32	48	39	33	29	30	26	23	22	19	17	14	13	12	9																			
8	51	40	33	28	45	36	30	25	28	23	20	20	18	16	13	12	11	8																			
9	47	36	29	25	42	32	27	23	25	21	18	19	16	14	12	11	10	8																			
10	44	33	27	22	39	30	24	20	23	19	16	17	15	13	11	10	9	7																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7714	7714	7714
5°	7590	7572	7628
10°	7102	7197	7397
15°	6456	6661	7032
20°	5731	6029	6557
25°	4991	5387	6025
30°	4275	4745	5521
35°	3545	4028	4911
40°	2724	3221	4185
45°	1968	2438	3367
50°	1342	1817	2671
55°	872	1315	2076
60°	501	925	1501
65°	132	565	760
70°	65	174	218
75°	29	14	0
80°	21	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.5	1.3
10°-20°	292.7	3.4
20°-30°	366.4	4.2
30°-40°	338.5	3.9
40°-50°	227.4	2.6
50°-60°	117.5	1.4
60°-70°	36.8	0.4
70°-80°	2.3	0.0
80°-90°	2.4	0.0
90°-100°	518.3	6.0
100°-110°	1401.4	16.1
110°-120°	1473.3	17.0
120°-130°	1196.7	13.8
130°-140°	938.7	10.8
140°-150°	720.5	8.3
150°-160°	518.2	6.0
160°-170°	316.5	3.6
170°-180°	106.7	1.2
0°-30°	773.6	8.9
0°-40°	1112.1	12.8
0°-60°	1457.0	16.8
0°-90°	1498.5	17.2
90°-120°	3393.0	39.0
90°-150°	6249.0	71.9
90°-180°	7190.0	82.7
0°-180°	8688.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1254	1254	1254	1254	1254	
5°	1229	1217	1226	1231	1235	114
15°	1014	1010	1046	1081	1104	282
25°	735	741	794	848	888	337
35°	472	484	536	600	654	292
45°	226	240	280	335	387	178
55°	81	95	123	157	194	76
65°	9	17	39	47	52	15
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	2	7	16	17	16	5
95°	80	282	862	446	265	84
105°	260	402	1555	2293	2199	274
115°	459	561	1289	2496	2818	453
125°	628	719	1162	1961	2304	560
135°	753	842	1131	1583	1792	582
145°	875	941	1115	1355	1459	547
155°	988	1027	1106	1216	1256	456
165°	1076	1086	1110	1154	1160	303
175°	1116	1115	1112	1126	1124	106
180°	1115	1115	1115	1115	1115	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1254.2	1254.2	1254.2	1254.2	1254.2
2.5°	1257.1	1245.2	1248.4	1248.3	1245.0
5°	1229.3	1216.9	1226.3	1230.6	1235.4
7.5°	1177.4	1167.6	1185.7	1199.3	1209.2
10°	1137.1	1128.8	1152.3	1170.8	1184.4
12.5°	1090.5	1084.1	1112.5	1137.8	1155.3
15°	1013.9	1010.4	1046.1	1081.2	1104.3
17.5°	931.9	931.8	972.5	1016.1	1044.0
20°	875.6	877.3	921.1	969.1	1001.8
22.5°	819.3	823.4	870.1	920.2	957.6
25°	735.4	741.3	793.7	848.0	887.7
27.5°	654.8	663.5	718.5	775.0	823.4
30°	601.9	612.0	668.1	727.4	777.3
32.5°	550.0	562.0	616.6	679.4	730.2
35°	472.1	483.9	536.4	599.5	654.1
37.5°	391.6	403.2	454.5	516.6	575.6
40°	339.2	352.2	401.1	461.3	521.2
42.5°	291.6	304.7	350.6	409.8	466.4
45°	226.3	240.0	280.3	334.9	387.1
47.5°	172.2	187.0	222.4	271.8	319.4
50°	140.2	155.0	189.9	233.4	279.1
52.5°	114.4	128.8	160.3	201.3	243.2
55°	81.3	95.0	122.6	157.4	193.6
57.5°	56.2	67.9	92.7	121.8	150.1
60°	40.7	51.9	75.2	98.8	122.0
62.5°	27.1	37.4	60.2	78.3	93.8
65°	9.1	17.4	38.8	46.8	52.2
67.5°	4.6	5.6	20.4	21.5	23.3
70°	3.6	3.6	9.7	10.4	12.1
72.5°	2.7	2.7	3.9	5.0	5.3
75°	1.2	1.2	0.6	0.0	0.0
77.5°	0.6	0.6	0.5	0.0	0.0
80°	0.6	0.6	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.5	1.4	3.1	3.4	3.1
90°	2.4	7.1	15.6	16.8	15.6
92.5°	34.1	124.2	245.1	106.4	77.1
95°	80.4	282.3	861.9	446.1	265.3
97.5°	129.2	323.8	1343.6	1111.9	816.6
100°	165.7	340.6	1493.4	1557.4	1259.3
102.5°	199.3	363.8	1546.2	1895.3	1672.3
105°	260.5	402.5	1554.6	2293.2	2199.3
107.5°	317.2	446.8	1486.7	2541.4	2572.6
110°	361.3	478.7	1426.2	2608.0	2740.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	400.7	510.6	1370.5	2594.7	2817.5
115°	458.6	560.7	1289.3	2495.9	2817.5
117.5°	515.2	611.0	1235.8	2344.9	2709.5
120°	549.8	643.7	1204.1	2236.5	2608.6
122.5°	582.5	674.5	1184.9	2120.4	2495.3
125°	627.8	719.4	1162.1	1961.0	2303.7
127.5°	669.6	759.5	1148.6	1830.9	2132.3
130°	692.7	785.4	1142.9	1750.5	2022.8
132.5°	716.7	808.5	1137.1	1678.0	1928.7
135°	752.7	841.9	1130.8	1583.4	1792.3
137.5°	789.0	873.2	1125.6	1506.6	1676.8
140°	813.9	892.6	1123.6	1457.2	1608.6
142.5°	837.9	911.9	1119.8	1412.6	1545.3
145°	875.1	940.9	1115.2	1355.3	1458.6
147.5°	909.0	967.2	1110.0	1303.4	1382.7
150°	934.0	985.6	1108.0	1275.1	1338.5
152.5°	957.0	1002.1	1107.1	1249.0	1301.1
155°	988.0	1026.7	1105.6	1215.8	1255.7
157.5°	1020.2	1047.2	1105.9	1192.7	1219.0
160°	1038.4	1060.7	1106.8	1178.1	1196.9
162.5°	1052.8	1071.4	1107.8	1166.5	1180.5
165°	1075.6	1086.2	1110.4	1153.8	1159.7
167.5°	1091.2	1098.5	1110.7	1142.9	1145.7
170°	1100.8	1104.4	1111.6	1138.1	1138.1
172.5°	1108.5	1109.2	1111.6	1132.3	1131.3
175°	1116.4	1115.3	1111.6	1126.0	1123.6
177.5°	1119.1	1116.3	1111.4	1120.9	1118.1
180°	1115.2	1115.2	1115.2	1115.2	1115.2

(END OF REPORT)