

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: P518789

Luminaire Tested: **SQ4-BB-125U-050D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518789
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-050D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

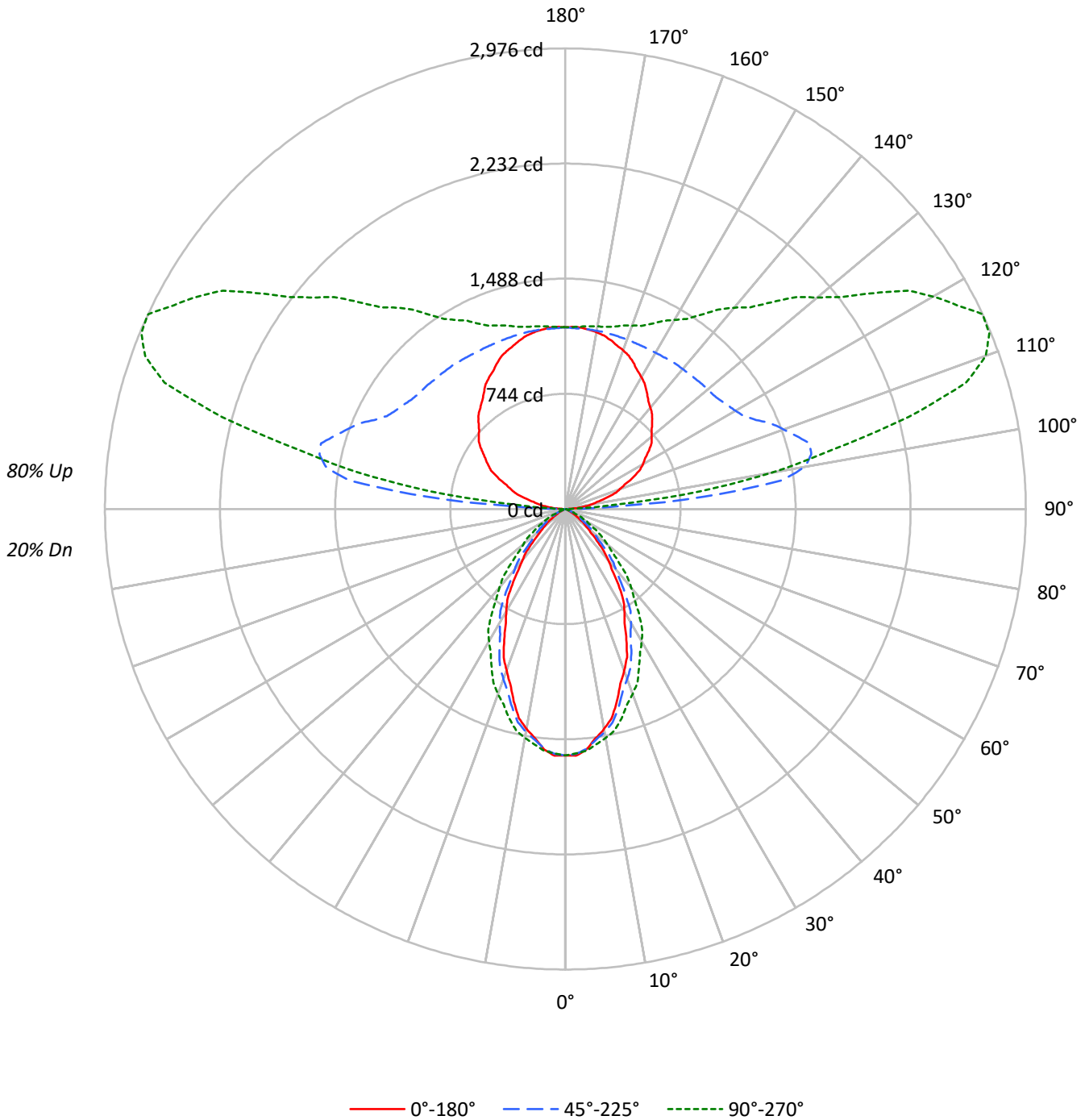
Lumens per Lamp: N/A
Luminaire Lumens: 9476.3 lumens
Efficiency: N/A
Efficacy: 127.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 74.2
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					70					50					30					10				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0				
RCR																									
0	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20							
1	92	88	84	81	81	78	75	73	59	58	56	42	41	40	26	26	25	18							
2	84	78	72	68	74	69	64	61	53	50	47	38	36	35	24	23	23	17							
3	77	69	62	57	68	61	56	52	47	44	41	34	32	30	22	21	20	15							
4	71	61	54	49	63	55	49	44	42	38	35	31	28	26	20	19	18	14							
5	65	55	47	42	58	49	43	38	38	34	31	28	25	23	19	17	16	12							
6	60	49	42	37	53	44	38	33	35	30	27	26	23	21	17	16	15	11							
7	56	45	37	32	49	40	34	29	31	27	24	23	21	19	16	14	13	10							
8	52	40	33	29	46	36	30	26	29	24	21	21	19	17	15	13	12	9							
9	48	37	30	26	43	33	27	23	26	22	19	20	17	15	14	12	11	9							
10	45	34	27	23	40	31	25	21	24	20	17	18	16	14	13	11	10	8							

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9792	9792	9792
5°	9634	9610	9682
10°	9014	9135	9390
15°	8195	8455	8926
20°	7275	7652	8323
25°	6335	6837	7647
30°	5426	6023	7007
35°	4499	5112	6235
40°	3457	4088	5312
45°	2499	3095	4274
50°	1702	2307	3390
55°	1107	1669	2635
60°	635	1175	1904
65°	169	718	963
70°	83	221	277
75°	36	19	0
80°	28	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.3	1.5
10°-20°	371.5	3.9
20°-30°	465.1	4.9
30°-40°	429.6	4.5
40°-50°	288.7	3.0
50°-60°	149.1	1.6
60°-70°	46.7	0.5
70°-80°	2.9	0.0
80°-90°	2.8	0.0
90°-100°	548.9	5.8
100°-110°	1478.5	15.6
110°-120°	1551.7	16.4
120°-130°	1259.2	13.3
130°-140°	987.5	10.4
140°-150°	758.2	8.0
150°-160°	545.1	5.8
160°-170°	333.0	3.5
170°-180°	112.3	1.2
0°-30°	982.0	10.4
0°-40°	1411.6	14.9
0°-60°	1849.4	19.5
0°-90°	1901.8	20.1
90°-120°	3579.1	37.8
90°-150°	6584.0	69.5
90°-180°	7574.0	79.9
0°-180°	9476.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1592	1592	1592	1592	1592	
5°	1560	1545	1556	1562	1568	145
15°	1287	1282	1328	1372	1402	358
25°	934	941	1007	1076	1127	428
35°	599	614	681	761	830	371
45°	287	305	356	425	491	226
55°	103	120	156	200	246	96
65°	12	22	49	60	66	20
75°	2	2	1	0	0	2
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: P518789

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1592.0	1592.0	1592.0	1592.0	1592.0
2.5°	1595.7	1580.6	1584.6	1584.5	1580.3
5°	1560.4	1544.6	1556.5	1562.1	1568.1
7.5°	1494.5	1482.1	1505.1	1522.3	1534.8
10°	1443.3	1432.8	1462.6	1486.1	1503.4
12.5°	1384.2	1376.0	1412.0	1444.3	1466.4
15°	1287.0	1282.5	1327.8	1372.4	1401.7
17.5°	1182.8	1182.7	1234.4	1289.8	1325.2
20°	1111.4	1113.6	1169.1	1230.2	1271.6
22.5°	1039.9	1045.2	1104.4	1168.1	1215.5
25°	933.5	941.0	1007.4	1076.3	1126.8
27.5°	831.2	842.2	912.0	983.7	1045.1
30°	764.0	776.8	848.0	923.3	986.6
32.5°	698.1	713.3	782.7	862.4	926.8
35°	599.2	614.3	680.8	761.0	830.3
37.5°	497.1	511.8	576.9	655.7	730.6
40°	430.5	447.1	509.1	585.5	661.6
42.5°	370.1	386.7	445.0	520.1	592.0
45°	287.3	304.6	355.8	425.1	491.4
47.5°	218.6	237.4	282.3	345.0	405.4
50°	177.9	196.7	241.1	296.3	354.3
52.5°	145.3	163.5	203.5	255.5	308.7
55°	103.2	120.5	155.6	199.8	245.7
57.5°	71.3	86.2	117.7	154.5	190.5
60°	51.6	65.9	95.5	125.4	154.8
62.5°	34.4	47.5	76.4	99.3	119.1
65°	11.6	22.1	49.3	59.5	66.2
67.5°	5.9	7.1	25.9	27.3	29.6
70°	4.6	4.6	12.3	13.1	15.4
72.5°	3.4	3.4	4.9	6.3	6.8
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	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°	0.6	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



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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)