

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: P518543

Luminaire Tested: **SQ4-BB-075U-100D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518543
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-100D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

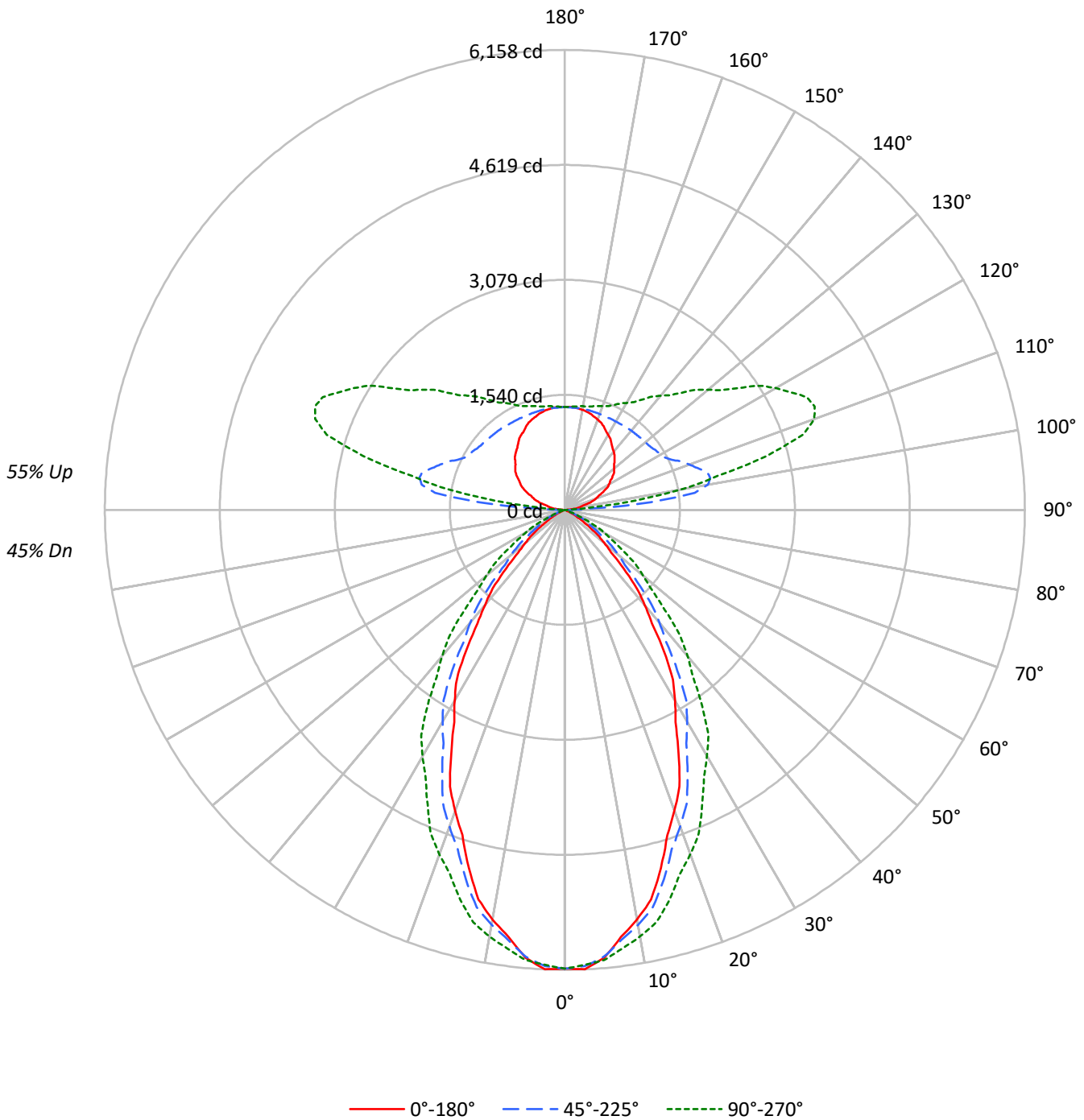
Lumens per Lamp: N/A
Luminaire Lumens: 16313.5 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 162.2
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				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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	51	51	51	45
1	98	95	91	88	90	87	84	82	73	71	69	60	59	58	48	47	47	41
2	91	84	79	75	83	78	74	70	66	63	60	55	53	51	44	43	42	37
3	84	76	69	64	77	70	65	60	60	56	52	50	47	45	41	39	38	33
4	78	68	61	56	71	63	57	53	54	50	46	46	42	40	38	36	34	30
5	72	62	55	49	66	57	51	46	49	45	41	42	38	36	35	32	31	28
6	67	56	49	44	62	52	46	41	45	40	37	38	35	32	32	30	28	25
7	62	51	44	39	57	48	42	37	41	37	33	36	32	29	30	27	26	23
8	58	47	40	35	54	44	38	33	38	33	30	33	29	27	28	25	23	21
9	54	43	36	32	50	41	34	30	35	31	27	31	27	25	26	24	22	20
10	51	40	33	29	47	38	32	28	33	28	25	29	25	23	24	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18893	18893	18893
5°	18590	18544	18681
10°	17394	17626	18117
15°	15813	16314	17223
20°	14036	14766	16059
25°	12224	13192	14755
30°	10470	11620	13520
35°	8681	9864	12029
40°	6670	7887	10250
45°	4822	5972	8247
50°	3285	4451	6541
55°	2136	3219	5084
60°	1225	2267	3674
65°	325	1384	1860
70°	160	428	534
75°	70	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	560.7	3.4
10°-20°	1433.8	8.8
20°-30°	1794.9	11.0
30°-40°	1657.9	10.2
40°-50°	1114.0	6.8
50°-60°	575.4	3.5
60°-70°	180.2	1.1
70°-80°	11.4	0.1
80°-90°	3.7	0.0
90°-100°	650.2	4.0
100°-110°	1789.0	11.0
110°-120°	1846.5	11.3
120°-130°	1479.4	9.1
130°-140°	1162.0	7.1
140°-150°	890.5	5.5
150°-160°	640.2	3.9
160°-170°	391.5	2.4
170°-180°	132.0	0.8
0°-30°	3789.4	23.2
0°-40°	5447.3	33.4
0°-60°	7136.8	43.7
0°-90°	7332.1	44.9
90°-120°	4285.7	26.3
90°-150°	7817.7	47.9
90°-180°	8981.0	55.1
0°-180°	16313.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6143	6143	6143	6143	6143	
5°	6022	5961	6007	6028	6051	558
15°	4966	4949	5124	5296	5409	1383
25°	3602	3631	3888	4154	4348	1651
35°	2312	2370	2627	2937	3204	1432
45°	1109	1176	1373	1640	1896	871
55°	398	465	600	771	948	372
65°	45	85	190	230	256	75
75°	6	6	3	0	0	9
85°	0	0	0	0	0	1
90°	3	12	20	26	26	6
95°	97	355	1150	492	314	102
105°	320	492	1971	3002	2801	337
115°	566	690	1581	3148	3573	559
125°	780	889	1434	2426	2842	696
135°	942	1045	1393	1962	2220	727
145°	1088	1163	1373	1672	1801	682
155°	1232	1272	1364	1503	1546	566
165°	1332	1349	1370	1426	1434	375
175°	1379	1382	1373	1390	1387	131
180°	1379	1379	1379	1379	1379	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6143.4	6143.4	6143.4	6143.4	6143.4
2.5°	6157.7	6099.6	6114.9	6114.5	6098.3
5°	6021.6	5960.6	6006.7	6028.1	6051.3
7.5°	5767.2	5719.5	5808.2	5874.7	5922.9
10°	5569.8	5529.1	5644.1	5734.8	5801.6
12.5°	5341.6	5310.2	5449.2	5573.5	5659.0
15°	4966.5	4949.0	5124.0	5296.0	5409.3
17.5°	4564.6	4564.1	4763.8	4977.3	5113.9
20°	4288.8	4297.5	4511.7	4747.2	4907.0
22.5°	4013.0	4033.3	4262.1	4507.6	4690.7
25°	3602.3	3631.3	3887.6	4153.6	4348.3
27.5°	3207.6	3250.0	3519.6	3796.1	4033.2
30°	2948.4	2997.8	3272.3	3563.2	3807.3
32.5°	2694.0	2752.7	3020.3	3327.9	3576.7
35°	2312.3	2370.5	2627.4	2936.6	3204.0
37.5°	1918.2	1975.2	2226.1	2530.5	2819.4
40°	1661.4	1725.4	1964.6	2259.6	2553.1
42.5°	1428.4	1492.4	1717.3	2007.2	2284.4
45°	1108.6	1175.5	1373.1	1640.5	1896.2
47.5°	843.5	916.2	1089.6	1331.5	1564.5
50°	686.6	759.2	930.3	1143.4	1367.2
52.5°	560.5	630.9	785.2	986.1	1191.2
55°	398.3	465.1	600.4	770.8	948.1
57.5°	275.2	332.8	454.1	596.4	735.3
60°	199.1	254.4	368.5	484.1	597.4
62.5°	132.6	183.1	294.8	383.4	459.5
65°	44.6	85.3	190.2	229.5	255.6
67.5°	22.6	27.2	99.9	105.4	114.1
70°	17.8	17.8	47.6	50.7	59.4
72.5°	13.1	13.1	19.0	24.4	26.2
75°	5.9	5.9	3.0	0.0	0.0
77.5°	3.0	3.0	2.4	0.0	0.0
80°	3.0	3.0	0.0	0.0	0.0
82.5°	0.6	0.6	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	2.3	4.1	5.3	5.3
90°	2.9	11.5	20.5	26.4	26.4
92.5°	40.5	173.0	299.8	115.1	94.5
95°	96.8	354.9	1149.9	491.7	313.9
97.5°	157.8	393.6	1754.7	1352.0	953.9
100°	202.4	417.5	1944.8	1963.0	1601.6
102.5°	244.6	446.0	1994.1	2435.3	2103.8
105°	319.7	491.8	1971.2	3002.1	2801.3
107.5°	391.3	548.5	1859.1	3279.6	3339.3
110°	442.9	586.3	1774.6	3348.7	3555.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	489.9	628.7	1690.2	3304.2	3618.5
115°	566.1	689.5	1581.0	3148.3	3572.8
117.5°	638.9	752.4	1511.8	2929.5	3409.7
120°	683.5	792.4	1481.3	2765.6	3261.8
122.5°	723.4	832.3	1460.2	2621.9	3092.9
125°	780.3	889.2	1434.4	2426.5	2842.4
127.5°	834.2	938.1	1417.4	2263.4	2628.2
130°	862.4	968.5	1408.0	2166.5	2499.2
132.5°	895.2	1001.4	1400.9	2081.3	2381.8
135°	941.6	1044.8	1393.3	1962.4	2220.5
137.5°	985.0	1080.8	1386.9	1866.3	2079.1
140°	1017.9	1106.8	1384.5	1802.5	1994.6
142.5°	1046.0	1128.0	1379.8	1745.5	1910.2
145°	1088.3	1162.8	1372.8	1672.0	1801.0
147.5°	1133.4	1197.7	1369.3	1606.9	1710.1
150°	1161.6	1218.9	1366.9	1571.1	1651.4
152.5°	1187.4	1240.2	1364.6	1540.3	1606.9
155°	1232.0	1272.1	1364.0	1502.8	1545.8
157.5°	1264.3	1296.9	1364.0	1472.0	1501.8
160°	1287.7	1313.5	1364.0	1455.4	1478.4
162.5°	1306.5	1327.7	1366.3	1441.3	1459.6
165°	1331.7	1348.9	1369.8	1425.8	1434.4
167.5°	1349.3	1362.5	1372.8	1412.7	1415.0
170°	1361.0	1369.7	1372.8	1408.0	1408.0
172.5°	1370.4	1374.5	1372.8	1400.9	1398.6
175°	1378.6	1381.5	1372.8	1390.3	1387.4
177.5°	1381.0	1381.0	1371.6	1385.6	1381.0
180°	1378.6	1378.6	1378.6	1378.6	1378.6

(END OF REPORT)