

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: P518495

Luminaire Tested: **SQ4-BB-075U-050D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518495  
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-050D-835-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

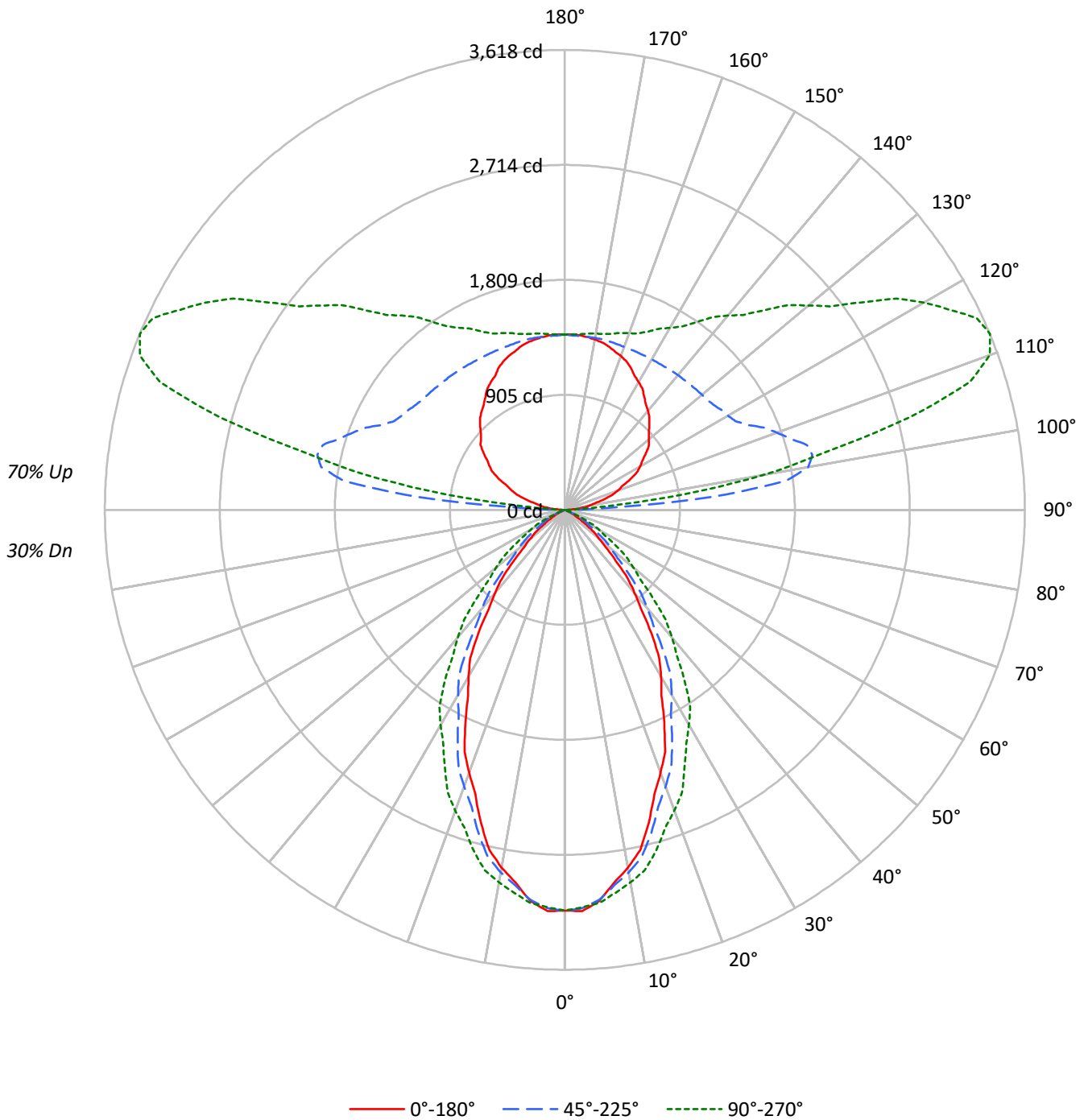
Lumens per Lamp: N/A  
Luminaire Lumens: 12745.2 lumens  
Efficiency: N/A  
Efficacy: 118.7 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 107.4  
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	87	84	84	81	79	76	64	63	61	49	48	47	35	34	33	27
2	87	80	75	70	78	72	68	64	58	55	52	44	42	41	32	31	30	24
3	80	71	65	60	72	65	59	55	52	48	45	40	38	36	29	28	27	22
4	73	64	57	52	66	58	52	47	47	43	39	36	34	32	27	25	24	20
5	68	57	50	45	61	52	46	41	42	38	35	33	30	28	25	23	22	18
6	63	52	45	39	56	47	41	36	39	34	31	30	27	25	23	21	20	16
7	58	47	40	35	52	43	37	32	35	31	27	28	25	23	21	19	18	15
8	54	43	36	31	49	39	33	29	32	28	25	26	23	21	20	18	16	14
9	51	39	33	28	46	36	30	26	30	25	22	24	21	19	18	16	15	13
10	47	36	30	25	43	33	27	24	28	23	20	22	19	17	17	15	14	12

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9694	9694	9694
5°	9538	9515	9585
10°	8925	9044	9296
15°	8114	8371	8837
20°	7202	7576	8240
25°	6272	6769	7571
30°	5372	5962	6937
35°	4455	5061	6172
40°	3422	4047	5259
45°	2474	3064	4232
50°	1686	2284	3356
55°	1096	1652	2609
60°	629	1163	1885
65°	167	710	955
70°	83	219	274
75°	37	18	0
80°	27	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	287.7	2.3
10°-20°	735.7	5.8
20°-30°	921.0	7.2
30°-40°	850.7	6.7
40°-50°	571.6	4.5
50°-60°	295.2	2.3
60°-70°	92.5	0.7
70°-80°	5.8	0.0
80°-90°	3.6	0.0
90°-100°	650.2	5.1
100°-110°	1789.0	14.0
110°-120°	1846.5	14.5
120°-130°	1479.4	11.6
130°-140°	1162.0	9.1
140°-150°	890.5	7.0
150°-160°	640.2	5.0
160°-170°	391.5	3.1
170°-180°	132.0	1.0
0°-30°	1944.3	15.3
0°-40°	2795.0	21.9
0°-60°	3661.9	28.7
0°-90°	3763.8	29.5
90°-120°	4285.7	33.6
90°-150°	7817.7	61.3
90°-180°	8981.0	70.5
0°-180°	12745.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3152	3152	3152	3152	3152	
5°	3090	3058	3082	3093	3105	286
15°	2548	2539	2629	2717	2776	710
25°	1848	1863	1995	2131	2231	847
35°	1186	1216	1348	1507	1644	735
45°	569	603	705	842	973	447
55°	204	239	308	396	486	191
65°	23	44	98	118	131	39
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
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°	3152.2	3152.2	3152.2	3152.2	3152.2
2.5°	3159.5	3129.7	3137.6	3137.4	3129.0
5°	3089.7	3058.4	3082.1	3093.0	3104.9
7.5°	2959.1	2934.7	2980.2	3014.3	3039.1
10°	2857.9	2837.0	2896.0	2942.5	2976.8
12.5°	2740.8	2724.7	2796.0	2859.8	2903.6
15°	2548.3	2539.4	2629.1	2717.4	2775.5
17.5°	2342.1	2341.8	2444.3	2553.9	2623.9
20°	2200.6	2205.1	2315.0	2435.8	2517.8
22.5°	2059.1	2069.5	2186.9	2312.8	2406.8
25°	1848.3	1863.2	1994.7	2131.2	2231.1
27.5°	1645.8	1667.6	1805.9	1947.8	2069.4
30°	1512.8	1538.2	1679.0	1828.3	1953.5
32.5°	1382.3	1412.4	1549.7	1707.6	1835.2
35°	1186.5	1216.3	1348.1	1506.8	1644.0
37.5°	984.2	1013.5	1142.2	1298.4	1446.6
40°	852.5	885.3	1008.0	1159.4	1310.0
42.5°	732.9	765.7	881.2	1029.9	1172.1
45°	568.8	603.1	704.6	841.7	973.0
47.5°	432.8	470.1	559.1	683.2	802.8
50°	352.3	389.6	477.3	586.7	701.5
52.5°	287.6	323.7	402.9	506.0	611.2
55°	204.4	238.6	308.1	395.5	486.5
57.5°	141.2	170.7	233.0	306.0	377.3
60°	102.2	130.5	189.1	248.4	306.5
62.5°	68.0	94.0	151.3	196.7	235.8
65°	22.9	43.8	97.6	117.7	131.2
67.5°	11.6	14.0	51.2	54.1	58.6
70°	9.2	9.2	24.4	26.0	30.5
72.5°	6.7	6.7	9.8	12.5	13.4
75°	3.1	3.1	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	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	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)