

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: P518437

Luminaire Tested: **SQ4-BB-050U-075D-935-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518437  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-075D-935-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

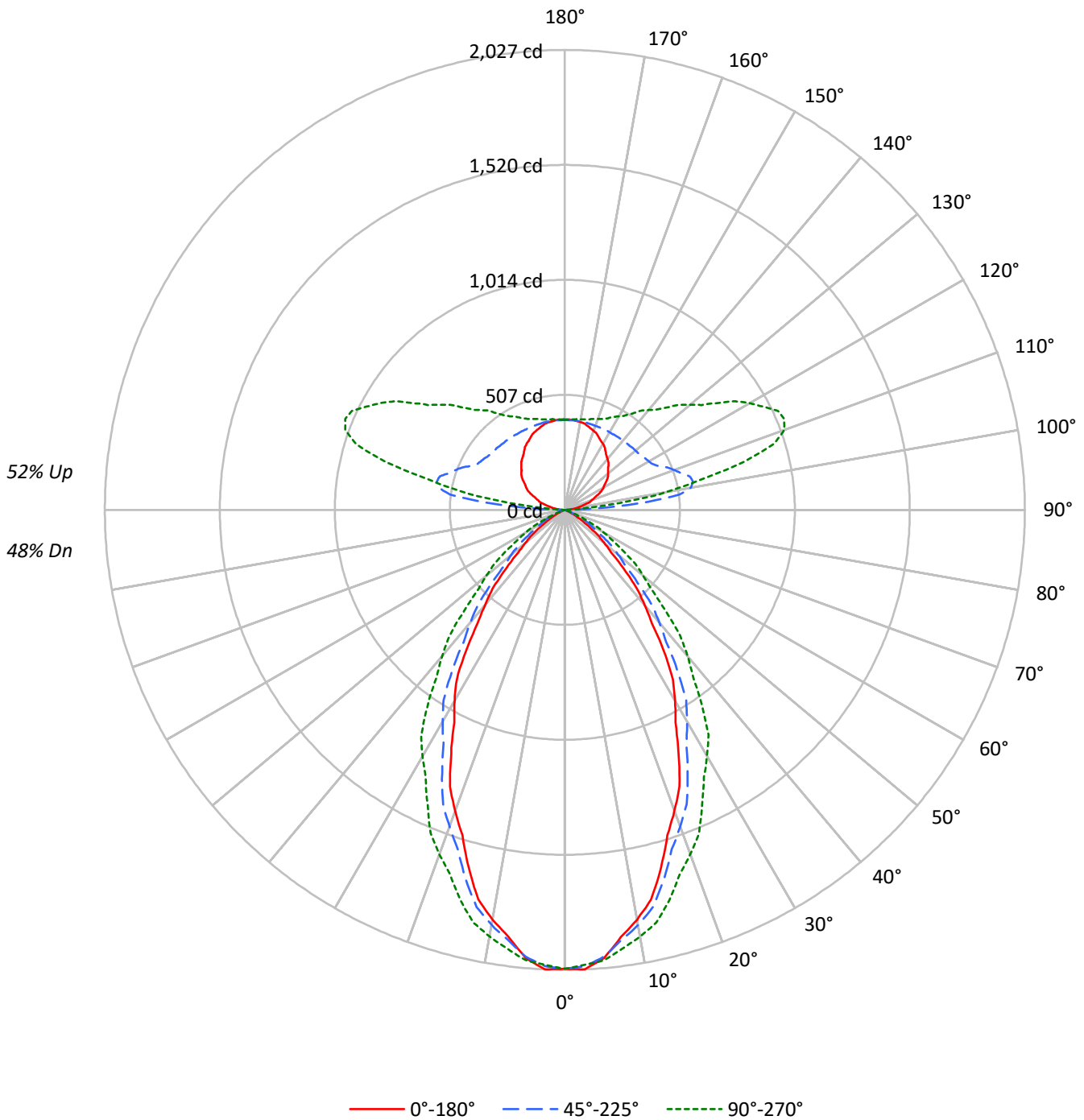
Lumens per Lamp: N/A  
Luminaire Lumens: 5010.4 lumens  
Efficiency: N/A  
Efficacy: 85.6 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 58.5  
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				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48		
1	99	95	92	89	91	88	85	83	75	73	71	62	61	60	51	50	49	44		
2	92	85	80	76	84	79	75	71	68	64	62	57	55	53	47	45	44	40		
3	85	77	70	65	78	71	66	62	61	57	54	52	49	47	43	41	40	36		
4	79	69	62	57	73	64	58	54	56	51	48	47	44	42	40	38	36	32		
5	73	63	55	50	67	59	52	48	51	46	42	44	40	37	37	34	33	29		
6	68	57	50	45	63	53	47	42	47	42	38	40	37	34	34	32	30	27		
7	63	52	45	40	58	49	43	38	43	38	34	37	33	31	32	29	27	25		
8	59	48	41	36	55	45	39	34	40	35	31	34	31	28	30	27	25	23		
9	55	44	37	33	51	42	35	31	37	32	28	32	28	26	28	25	23	21		
10	52	41	34	30	48	38	33	29	34	29	26	30	26	24	26	23	21	20		

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

	0°	45°	90°
0°	12440	12440	12440
5°	12240	12210	12300
10°	11453	11605	11929
15°	10411	10742	11340
20°	9242	9722	10574
25°	8048	8686	9715
30°	6894	7651	8902
35°	5716	6495	7920
40°	4392	5193	6749
45°	3175	3933	5431
50°	2163	2931	4307
55°	1406	2120	3347
60°	807	1492	2420
65°	214	911	1224
70°	106	282	352
75°	48	24	0
80°	35	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.6	3.7
10°-20°	472.0	9.4
20°-30°	590.9	11.8
30°-40°	545.8	10.9
40°-50°	366.8	7.3
50°-60°	189.4	3.8
60°-70°	59.3	1.2
70°-80°	3.8	0.1
80°-90°	1.6	0.0
90°-100°	190.9	3.8
100°-110°	518.5	10.3
110°-120°	533.1	10.6
120°-130°	426.2	8.5
130°-140°	334.9	6.7
140°-150°	256.8	5.1
150°-160°	184.7	3.7
160°-170°	112.9	2.3
170°-180°	38.1	0.8
0°-30°	1247.5	24.9
0°-40°	1793.3	35.8
0°-60°	2349.5	46.9
0°-90°	2414.2	48.2
90°-120°	1242.5	24.8
90°-150°	2260.4	45.1
90°-180°	2596.0	51.8
0°-180°	5010.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2022	2022	2022	2022	2022	
5°	1982	1962	1978	1984	1992	184
15°	1635	1629	1687	1744	1781	455
25°	1186	1196	1280	1367	1432	544
35°	761	780	865	967	1055	472
45°	365	387	452	540	624	287
55°	131	153	198	254	312	122
65°	15	28	63	76	84	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	1	5	9	12	12	2
95°	28	104	332	145	97	30
105°	92	143	570	868	817	98
115°	164	199	456	908	1034	161
125°	225	256	413	696	821	201
135°	271	301	402	567	639	210
145°	313	336	396	482	518	197
155°	354	367	394	432	445	163
165°	384	389	395	412	413	108
175°	398	399	396	401	400	38
180°	398	398	398	398	398	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2022.5	2022.5	2022.5	2022.5	2022.5
2.5°	2027.2	2008.1	2013.1	2013.0	2007.7
5°	1982.4	1962.3	1977.5	1984.5	1992.2
7.5°	1898.7	1883.0	1912.2	1934.0	1949.9
10°	1833.7	1820.3	1858.1	1888.0	1910.0
12.5°	1758.5	1748.2	1794.0	1834.9	1863.0
15°	1635.0	1629.3	1686.9	1743.5	1780.8
17.5°	1502.8	1502.6	1568.3	1638.6	1683.6
20°	1412.0	1414.8	1485.3	1562.9	1615.5
22.5°	1321.1	1327.8	1403.1	1484.0	1544.2
25°	1185.9	1195.5	1279.9	1367.4	1431.5
27.5°	1056.0	1069.9	1158.7	1249.7	1327.8
30°	970.7	986.9	1077.3	1173.1	1253.4
32.5°	886.9	906.2	994.3	1095.6	1177.5
35°	761.3	780.4	865.0	966.8	1054.8
37.5°	631.5	650.3	732.9	833.1	928.2
40°	547.0	568.0	646.8	743.9	840.5
42.5°	470.3	491.3	565.4	660.8	752.1
45°	365.0	387.0	452.1	540.1	624.3
47.5°	277.7	301.6	358.7	438.3	515.1
50°	226.0	249.9	306.3	376.4	450.1
52.5°	184.5	207.7	258.5	324.6	392.2
55°	131.1	153.1	197.7	253.8	312.1
57.5°	90.6	109.6	149.5	196.3	242.1
60°	65.6	83.7	121.3	159.4	196.7
62.5°	43.6	60.3	97.1	126.2	151.3
65°	14.7	28.1	62.6	75.5	84.1
67.5°	7.4	9.0	32.9	34.7	37.6
70°	5.9	5.9	15.7	16.7	19.6
72.5°	4.3	4.3	6.3	8.0	8.6
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	0.3	1.0	1.8	2.3	2.3
90°	1.3	5.0	8.9	11.5	11.5
92.5°	11.5	52.3	90.8	39.0	33.0
95°	28.1	104.4	332.4	144.7	97.2
97.5°	46.5	115.3	509.6	396.5	278.5
100°	58.8	122.6	563.8	571.5	461.5
102.5°	71.1	129.8	578.1	706.9	609.8
105°	92.1	143.3	570.2	868.2	817.0
107.5°	113.8	159.0	537.2	951.5	965.8
110°	129.1	170.4	512.7	967.9	1029.2

TEST NUMBER: P518437

CATALOG NUMBER: SQ4-BB-050U-075D-935-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	142.4	181.7	488.1	954.3	1046.6
115°	163.6	198.7	456.4	908.1	1034.3
117.5°	183.6	217.1	436.2	842.4	984.7
120°	196.9	229.4	427.0	798.4	939.7
122.5°	208.1	240.6	420.9	754.3	890.6
125°	225.0	256.3	413.0	695.8	820.8
127.5°	240.1	271.1	408.6	651.4	758.7
130°	249.3	279.3	406.6	623.5	719.8
132.5°	258.5	288.5	404.5	599.8	685.0
135°	271.0	301.0	401.5	566.7	639.3
137.5°	284.6	311.8	399.9	537.6	598.6
140°	292.8	319.0	398.9	519.0	574.0
142.5°	301.0	325.2	397.9	504.5	550.5
145°	313.2	335.7	396.3	481.5	517.8
147.5°	327.0	346.3	395.1	463.5	492.0
150°	336.2	352.5	395.1	453.1	475.6
152.5°	343.4	357.7	394.0	443.8	462.3
155°	354.1	366.6	393.8	432.4	444.9
157.5°	364.6	374.4	393.8	424.7	434.2
160°	370.8	379.5	393.8	419.5	427.0
162.5°	376.9	383.7	394.8	415.4	420.9
165°	383.6	388.6	395.1	411.7	413.0
167.5°	390.5	393.0	396.3	407.4	408.4
170°	392.5	395.0	396.3	405.3	405.3
172.5°	394.5	396.0	396.3	403.2	403.2
175°	397.6	398.9	396.3	401.4	400.2
177.5°	398.6	398.6	395.6	399.6	397.6
180°	397.6	397.6	397.6	397.6	397.6

(END OF REPORT)