

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: P518479

Luminaire Tested: **SQ4-BB-050U-125D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518479  
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-125D-930-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

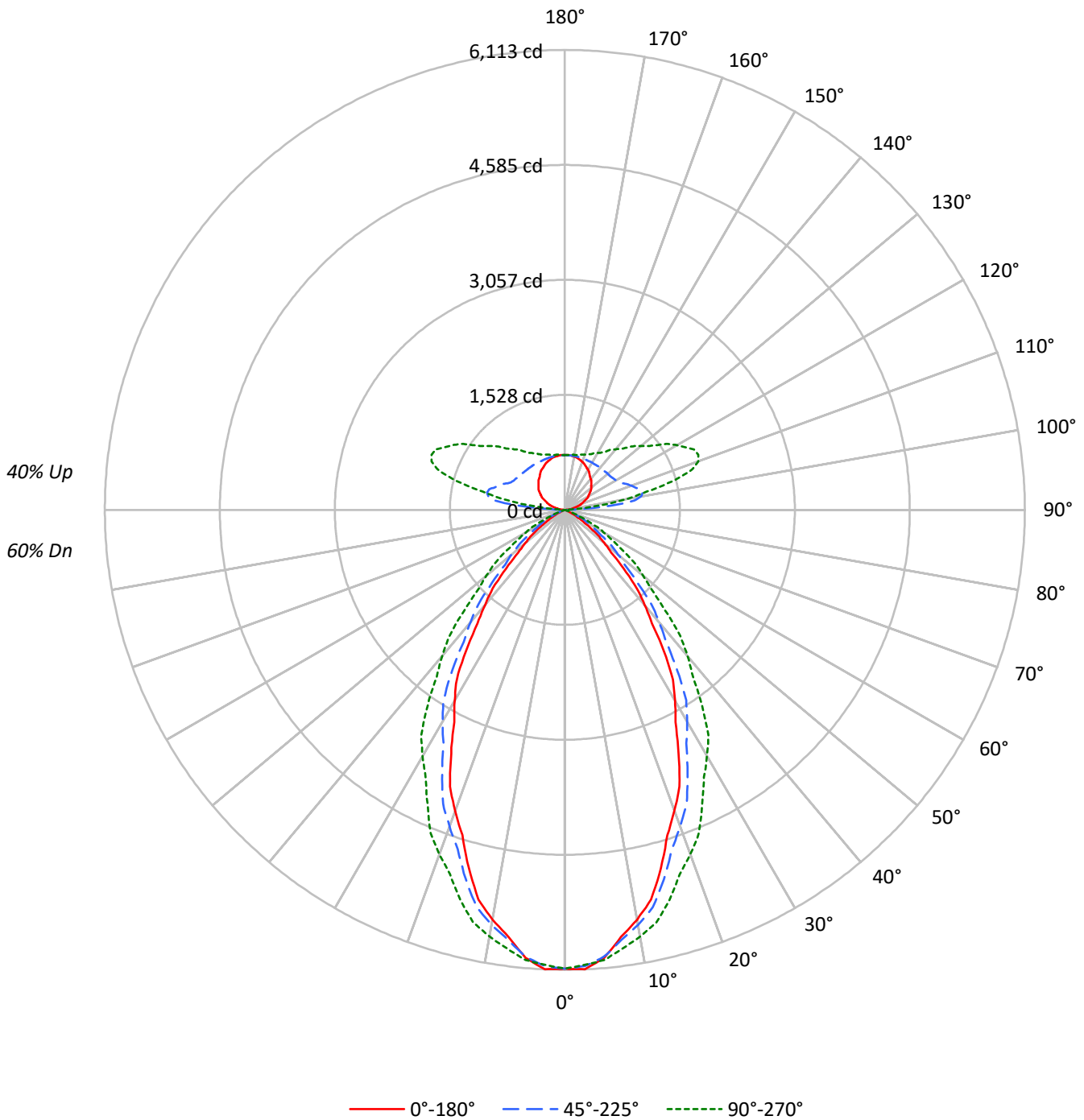
Lumens per Lamp: N/A  
Luminaire Lumens: 12033.5 lumens  
Efficiency: N/A  
Efficacy: 72.1 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 167  
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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66	60
1	102	99	96	93	96	93	90	88	81	79	78	71	70	68	61	61	60	55
2	95	89	84	79	89	84	79	76	74	71	68	65	63	61	57	55	54	50
3	88	80	74	69	83	76	70	66	67	63	60	60	57	54	52	50	48	45
4	82	73	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44	41
5	76	66	59	54	72	63	56	52	56	51	48	50	47	44	45	42	40	37
6	71	60	53	48	67	57	51	46	52	47	43	47	43	40	42	39	36	34
7	66	55	48	43	62	53	46	42	48	43	39	43	39	36	39	36	33	31
8	62	51	44	39	59	49	42	38	44	39	35	40	36	33	36	33	31	29
9	58	47	40	36	55	45	39	35	41	36	33	37	33	30	34	31	28	26
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	29	26	24

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

	0°	45°	90°
0°	18757	18757	18757
5°	18455	18409	18546
10°	17267	17498	17986
15°	15698	16196	17098
20°	13934	14659	15943
25°	12135	13096	14648
30°	10394	11536	13422
35°	8619	9793	11942
40°	6622	7830	10176
45°	4787	5929	8188
50°	3261	4418	6494
55°	2120	3196	5047
60°	1216	2251	3648
65°	322	1374	1847
70°	159	424	531
75°	70	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	556.6	4.6
10°-20°	1423.4	11.8
20°-30°	1781.9	14.8
30°-40°	1645.9	13.7
40°-50°	1106.0	9.2
50°-60°	571.3	4.7
60°-70°	178.9	1.5
70°-80°	11.3	0.1
80°-90°	3.0	0.0
90°-100°	349.6	2.9
100°-110°	949.7	7.9
110°-120°	976.5	8.1
120°-130°	780.7	6.5
130°-140°	613.5	5.1
140°-150°	470.4	3.9
150°-160°	338.3	2.8
160°-170°	206.9	1.7
170°-180°	69.7	0.6
0°-30°	3761.9	31.3
0°-40°	5407.8	44.9
0°-60°	7085.0	58.9
0°-90°	7278.3	60.5
90°-120°	2275.9	18.9
90°-150°	4140.4	34.4
90°-180°	4755.0	39.5
0°-180°	12033.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6099	6099	6099	6099	6099	
5°	5978	5917	5963	5984	6007	554
15°	4930	4913	5087	5258	5370	1373
25°	3576	3605	3859	4123	4317	1640
35°	2296	2353	2608	2915	3181	1422
45°	1101	1167	1363	1629	1882	864
55°	395	462	596	765	941	369
65°	44	85	189	228	254	75
75°	6	6	3	0	0	8
85°	0	0	0	0	0	1
90°	2	9	16	21	21	4
95°	52	191	609	265	178	55
105°	169	262	1044	1590	1496	179
115°	300	364	836	1663	1894	296
125°	412	469	756	1274	1503	367
135°	496	551	735	1038	1171	384
145°	574	615	726	882	948	360
155°	649	672	721	792	815	299
165°	702	712	724	754	756	198
175°	728	731	726	735	733	69
180°	728	728	728	728	728	

TEST NUMBER: P518479

CATALOG NUMBER: SQ4-BB-050U-125D-930-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6098.9	6098.9	6098.9	6098.9	6098.9
2.5°	6113.1	6055.4	6070.6	6070.2	6054.1
5°	5977.9	5917.4	5963.2	5984.4	6007.4
7.5°	5725.4	5678.0	5766.1	5832.1	5880.0
10°	5529.4	5489.1	5603.2	5693.2	5759.6
12.5°	5302.8	5271.7	5409.6	5533.1	5618.0
15°	4930.5	4913.2	5086.9	5257.6	5370.1
17.5°	4531.5	4531.0	4729.2	4941.2	5076.8
20°	4257.7	4266.4	4479.0	4712.8	4871.5
22.5°	3983.9	4004.1	4231.2	4474.9	4656.7
25°	3576.1	3605.0	3859.4	4123.4	4316.7
27.5°	3184.3	3226.4	3494.1	3768.6	4004.0
30°	2927.0	2976.1	3248.6	3537.4	3779.7
32.5°	2674.4	2732.7	2998.4	3303.8	3550.8
35°	2295.6	2353.3	2608.3	2915.3	3180.8
37.5°	1904.3	1960.9	2210.0	2512.2	2798.9
40°	1649.4	1712.9	1950.4	2243.2	2534.6
42.5°	1418.1	1481.5	1704.9	1992.6	2267.8
45°	1100.6	1166.9	1363.2	1628.6	1882.5
47.5°	837.4	909.5	1081.7	1321.8	1553.2
50°	681.6	753.7	923.5	1135.1	1357.3
52.5°	556.5	626.3	779.6	978.9	1182.6
55°	395.4	461.7	596.0	765.3	941.2
57.5°	273.2	330.4	450.9	592.1	730.0
60°	197.7	252.5	365.9	480.6	593.1
62.5°	131.6	181.8	292.7	380.6	456.2
65°	44.3	84.6	188.8	227.8	253.8
67.5°	22.4	27.0	99.1	104.6	113.3
70°	17.7	17.7	47.2	50.4	59.0
72.5°	13.0	13.0	18.9	24.2	26.0
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°	0.5	1.8	3.3	4.2	4.2
90°	2.3	9.2	16.4	21.1	21.1
92.5°	21.1	95.7	166.3	71.4	60.4
95°	51.5	191.2	608.9	265.0	178.0
97.5°	85.2	211.2	933.4	726.2	510.0
100°	107.7	224.5	1032.7	1046.9	845.4
102.5°	130.2	237.8	1059.0	1294.7	1117.0
105°	168.6	262.5	1044.4	1590.3	1496.4
107.5°	208.4	291.3	984.0	1742.9	1769.0
110°	236.5	312.1	939.1	1772.9	1885.1

TEST NUMBER: P518479

CATALOG NUMBER: SQ4-BB-050U-125D-930-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	260.9	332.8	894.1	1748.0	1917.0
115°	299.7	363.9	836.0	1663.2	1894.5
117.5°	336.3	397.6	799.0	1543.1	1803.6
120°	360.6	420.2	782.2	1462.5	1721.2
122.5°	381.2	440.8	770.9	1381.7	1631.3
125°	412.2	469.4	756.4	1274.4	1503.4
127.5°	439.8	496.6	748.4	1193.2	1389.6
130°	456.6	511.6	744.7	1142.1	1318.4
132.5°	473.5	528.5	740.9	1098.6	1254.7
135°	496.5	551.4	735.3	1038.1	1170.9
137.5°	521.3	571.2	732.5	984.7	1096.4
140°	536.3	584.4	730.6	950.7	1051.5
142.5°	551.3	595.7	728.8	924.1	1008.4
145°	573.7	615.0	726.0	882.0	948.4
147.5°	599.0	634.3	723.6	848.9	901.1
150°	615.9	645.7	723.6	829.9	871.1
152.5°	629.0	655.1	721.7	812.9	846.8
155°	648.7	671.6	721.3	792.0	814.9
157.5°	667.9	685.7	721.3	777.9	795.3
160°	679.1	695.1	721.3	768.4	782.2
162.5°	690.4	702.7	723.1	760.8	770.9
165°	702.5	711.7	723.6	754.1	756.4
167.5°	715.2	719.8	726.0	746.1	748.0
170°	718.9	723.5	726.0	742.3	742.3
172.5°	722.7	725.4	726.0	738.6	738.6
175°	728.3	730.6	726.0	735.3	733.0
177.5°	730.2	730.2	724.5	732.0	728.3
180°	728.3	728.3	728.3	728.3	728.3

(END OF REPORT)