

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: P518767

Luminaire Tested: **SQ4-BB-100U-125D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518767
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-125D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

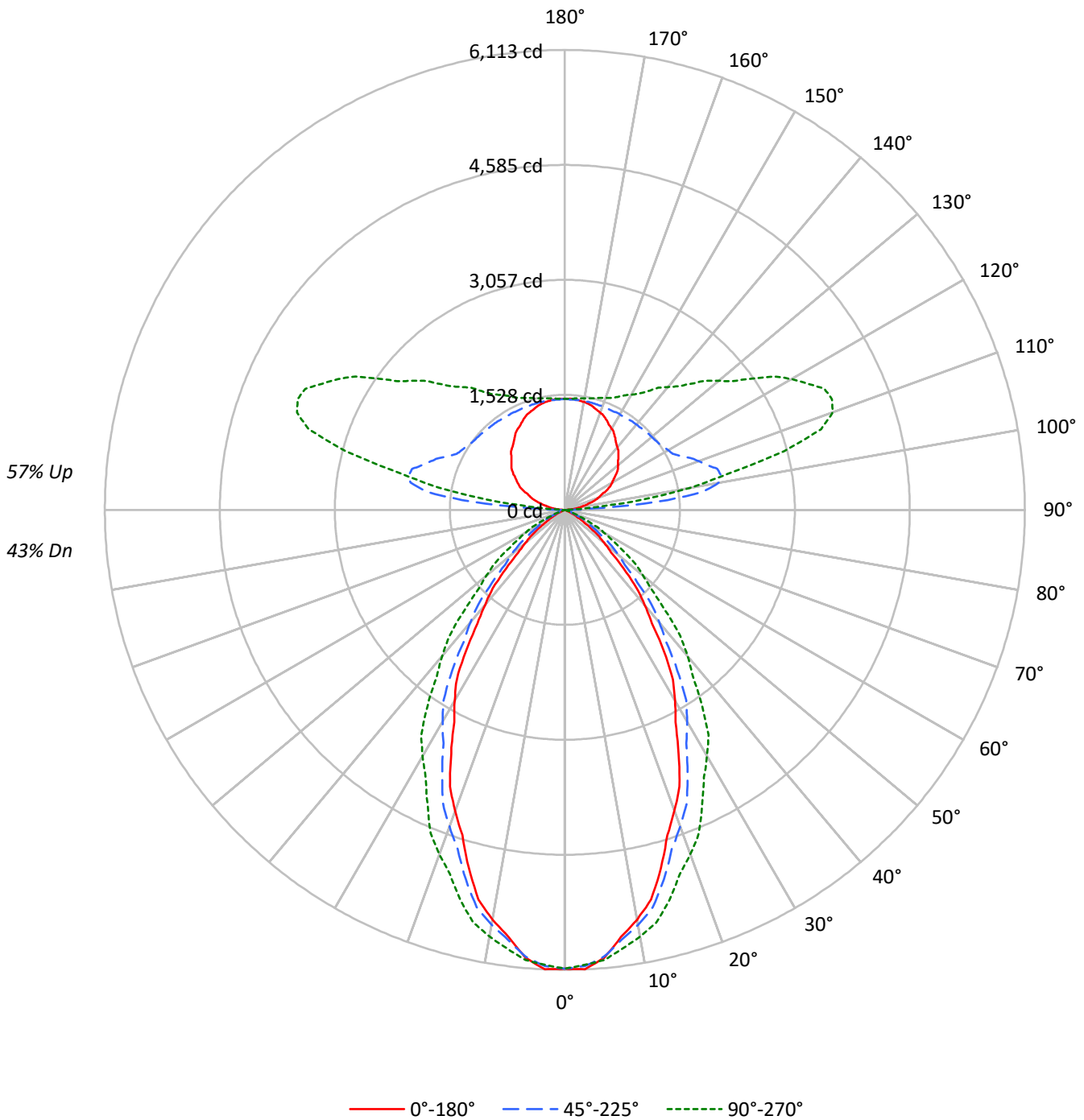
Lumens per Lamp: N/A
Luminaire Lumens: 16866.6 lumens
Efficiency: N/A
Efficacy: 78.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 214.8
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	50	30	10	0	
RCR																						
0	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43				43
1	98	94	91	88	89	86	84	81	72	70	68	59	57	56	46	46	45	39				39
2	90	84	79	74	83	77	73	69	65	62	59	53	51	50	43	42	40	36				36
3	83	75	69	64	76	70	64	60	59	55	52	49	46	44	39	38	36	32				32
4	77	68	61	56	71	63	57	52	53	49	45	44	41	39	36	34	33	29				29
5	71	61	54	49	66	57	51	46	49	44	40	41	38	35	34	31	30	26				26
6	66	56	48	43	61	52	45	41	44	40	36	38	34	31	31	29	27	24				24
7	62	51	44	39	57	47	41	37	41	36	32	35	31	29	29	27	25	22				22
8	58	46	39	35	53	43	37	33	38	33	29	32	29	26	27	24	23	20				20
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	23	21	19				19
10	51	40	33	29	47	37	31	27	32	28	25	28	24	22	24	21	19	17				17

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	3.3
10°-20°	1423.4	8.4
20°-30°	1781.9	10.6
30°-40°	1645.9	9.8
40°-50°	1106.0	6.6
50°-60°	571.3	3.4
60°-70°	178.9	1.1
70°-80°	11.3	0.1
80°-90°	3.3	0.0
90°-100°	691.1	4.1
100°-110°	1907.8	11.3
110°-120°	1967.5	11.7
120°-130°	1581.1	9.4
130°-140°	1242.6	7.4
140°-150°	953.0	5.7
150°-160°	684.9	4.1
160°-170°	418.9	2.5
170°-180°	141.2	0.8
0°-30°	3761.9	22.3
0°-40°	5407.8	32.1
0°-60°	7085.0	42.0
0°-90°	7278.6	43.2
90°-120°	4566.4	27.1
90°-150°	8343.0	49.5
90°-180°	9588.0	56.8
0°-180°	16866.6	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°	5	9	19	21	24	7
95°	102	374	1254	515	335	109
105°	340	525	2099	3204	3017	362
115°	609	736	1690	3347	3806	599
125°	836	951	1532	2593	3043	744
135°	1006	1114	1490	2100	2368	778
145°	1166	1247	1471	1788	1924	730
155°	1315	1359	1459	1604	1655	606
165°	1424	1442	1466	1523	1535	401
175°	1476	1478	1469	1490	1485	140
180°	1476	1476	1476	1476	1476	

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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°	0.9	1.9	3.8	4.3	4.7
90°	4.7	9.3	18.9	21.3	23.6
92.5°	42.5	176.4	315.4	115.1	89.7
95°	101.5	373.9	1253.7	515.3	335.3
97.5°	168.1	418.8	1857.2	1429.9	1035.6
100°	217.2	445.8	2080.1	2094.8	1702.3
102.5°	264.4	476.4	2123.5	2588.2	2216.1
105°	340.0	524.7	2099.0	3204.4	3017.4
107.5°	420.3	584.6	1981.9	3501.6	3569.9
110°	476.9	624.7	1891.2	3565.5	3787.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	527.9	670.1	1806.2	3515.0	3841.9
115°	609.1	736.1	1690.5	3346.6	3806.0
117.5°	680.0	806.5	1614.5	3109.6	3632.2
120°	727.2	851.9	1584.3	2949.1	3475.5
122.5°	772.5	891.7	1559.7	2799.3	3297.9
125°	835.8	951.2	1532.3	2593.2	3043.4
127.5°	889.6	1005.1	1516.3	2419.0	2807.3
130°	925.5	1041.0	1508.7	2312.4	2665.6
132.5°	959.5	1069.4	1501.2	2222.9	2542.8
135°	1005.8	1114.3	1489.8	2100.3	2368.1
137.5°	1057.7	1156.6	1484.2	1997.4	2226.0
140°	1086.1	1183.0	1480.4	1928.8	2129.7
142.5°	1118.2	1207.8	1476.6	1867.8	2044.7
145°	1166.4	1247.2	1470.9	1788.0	1924.3
147.5°	1212.6	1283.3	1465.7	1720.8	1826.5
150°	1246.6	1304.3	1463.8	1680.6	1766.1
152.5°	1273.1	1327.1	1462.0	1646.3	1717.0
155°	1315.1	1359.0	1459.1	1604.3	1655.1
157.5°	1353.8	1387.5	1459.6	1573.7	1608.3
160°	1376.5	1406.5	1461.5	1556.5	1581.9
162.5°	1395.4	1421.7	1463.4	1541.3	1561.1
165°	1423.7	1442.2	1466.2	1523.1	1534.7
167.5°	1445.4	1456.5	1468.6	1512.1	1515.8
170°	1456.8	1466.0	1468.6	1506.3	1506.3
172.5°	1466.2	1471.7	1468.6	1498.7	1496.9
175°	1475.7	1478.0	1468.6	1489.7	1485.1
177.5°	1479.4	1477.6	1468.1	1481.2	1477.5
180°	1475.7	1475.7	1475.7	1475.7	1475.7

(END OF REPORT)