

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: P518862

Luminaire Tested: **SQ4-BB-125U-125D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518862
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-125D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

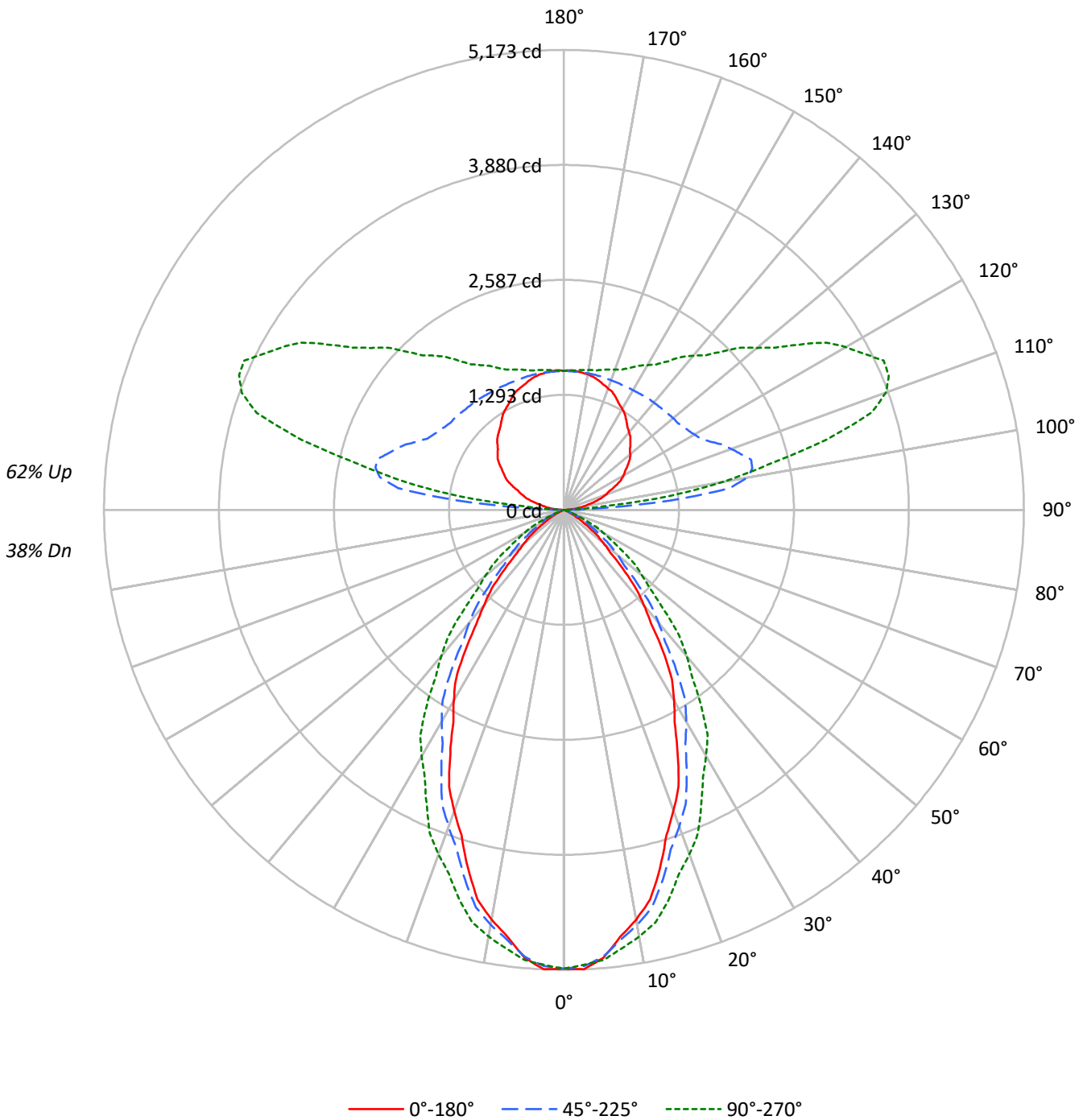
Lumens per Lamp: N/A
Luminaire Lumens: 16259.5 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 152.7
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	88	84	82	79	69	67	66	55	54	53	42	41	41	35
2	89	83	77	73	81	75	71	67	62	59	56	50	48	46	39	37	36	31
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	35	34	33	28
4	76	66	59	54	69	61	55	50	51	47	43	41	38	36	33	31	29	26
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23
6	65	54	47	42	59	50	44	39	42	37	34	35	32	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	41	35	30	48	39	32	28	33	28	25	28	24	22	23	20	19	17
10	49	38	32	27	45	36	30	26	31	26	23	26	22	20	21	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23808	23808	23808
5°	23425	23367	23541
10°	21918	22210	22830
15°	19926	20558	21702
20°	17687	18607	20237
25°	15403	16623	18593
30°	13194	14643	17037
35°	10939	12430	15158
40°	8405	9939	12916
45°	6076	7525	10393
50°	4140	5609	8242
55°	2691	4057	6406
60°	1544	2856	4631
65°	409	1744	2344
70°	202	538	673
75°	89	45	0
80°	66	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	471.0	2.9
10°-20°	1204.5	7.4
20°-30°	1507.9	9.3
30°-40°	1392.8	8.6
40°-50°	935.9	5.8
50°-60°	483.4	3.0
60°-70°	151.4	0.9
70°-80°	9.6	0.1
80°-90°	3.9	0.0
90°-100°	731.8	4.5
100°-110°	1971.4	12.1
110°-120°	2068.9	12.7
120°-130°	1678.9	10.3
130°-140°	1316.7	8.1
140°-150°	1010.9	6.2
150°-160°	726.8	4.5
160°-170°	444.1	2.7
170°-180°	149.7	0.9
0°-30°	3183.4	19.6
0°-40°	4576.2	28.1
0°-60°	5995.4	36.9
0°-90°	6160.3	37.9
90°-120°	4772.2	29.3
90°-150°	8778.6	54.0
90°-180°	10099.0	62.1
0°-180°	16259.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5161	5161	5161	5161	5161	
5°	5059	5007	5046	5064	5084	469
15°	4172	4158	4304	4449	4544	1162
25°	3026	3051	3266	3489	3653	1387
35°	1942	1991	2207	2467	2692	1203
45°	931	988	1154	1378	1593	731
55°	335	391	504	648	796	312
65°	38	72	160	193	215	63
75°	5	5	2	0	0	7
85°	0	0	0	0	0	1
90°	4	12	24	26	26	8
95°	112	398	1200	614	424	117
105°	365	567	2180	3262	3061	383
115°	644	788	1816	3508	3968	633
125°	879	1009	1630	2755	3242	785
135°	1058	1181	1584	2223	2517	817
145°	1224	1319	1564	1900	2041	767
155°	1389	1440	1550	1705	1760	639
165°	1507	1524	1556	1618	1626	425
175°	1566	1564	1558	1580	1576	149
180°	1564	1564	1564	1564	1564	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5161.0	5161.0	5161.0	5161.0	5161.0
2.5°	5172.9	5124.1	5137.0	5136.7	5123.0
5°	5058.6	5007.3	5046.1	5064.0	5083.6
7.5°	4844.9	4804.8	4879.3	4935.2	4975.7
10°	4679.1	4644.9	4741.5	4817.7	4873.8
12.5°	4487.3	4460.9	4577.7	4682.2	4754.0
15°	4172.2	4157.6	4304.5	4449.0	4544.2
17.5°	3834.6	3834.1	4001.9	4181.3	4296.1
20°	3602.9	3610.3	3790.2	3988.0	4122.3
22.5°	3371.2	3388.3	3580.5	3786.7	3940.5
25°	3026.2	3050.6	3265.9	3489.3	3652.9
27.5°	2694.6	2730.2	2956.7	3189.0	3388.2
30°	2476.9	2518.4	2749.0	2993.4	3198.4
32.5°	2263.1	2312.4	2537.3	2795.7	3004.7
35°	1942.5	1991.4	2207.2	2467.0	2691.6
37.5°	1611.5	1659.3	1870.1	2125.8	2368.5
40°	1395.7	1449.4	1650.4	1898.2	2144.8
42.5°	1200.0	1253.7	1442.7	1686.2	1919.1
45°	931.3	987.5	1153.5	1378.1	1593.0
47.5°	708.6	769.6	915.3	1118.5	1314.3
50°	576.8	637.8	781.5	960.6	1148.5
52.5°	470.9	530.0	659.7	828.4	1000.7
55°	334.6	390.7	504.4	647.6	796.5
57.5°	231.2	279.5	381.5	501.0	617.7
60°	167.3	213.7	309.6	406.7	501.9
62.5°	111.4	153.8	247.7	322.0	386.0
65°	37.5	71.6	159.8	192.8	214.7
67.5°	19.0	22.9	83.9	88.6	95.9
70°	15.0	15.0	39.9	42.6	49.9
72.5°	11.0	11.0	16.0	20.5	22.0
75°	5.0	5.0	2.5	0.0	0.0
77.5°	2.5	2.5	2.0	0.0	0.0
80°	2.5	2.5	0.0	0.0	0.0
82.5°	0.5	0.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	2.4	4.8	5.2	5.2
90°	4.0	11.8	23.9	25.9	25.9
92.5°	48.6	171.8	339.6	163.5	113.6
95°	111.6	398.0	1199.7	613.5	424.5
97.5°	178.2	455.6	1881.7	1572.0	1185.4
100°	229.2	478.6	2098.5	2195.6	1821.5
102.5°	278.6	510.9	2170.3	2662.7	2355.6
105°	364.7	567.4	2180.2	3261.8	3061.1
107.5°	446.0	626.8	2087.4	3569.7	3621.5
110°	500.2	671.7	2002.9	3665.2	3854.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	557.6	716.6	1921.5	3644.1	3954.7
115°	643.7	787.9	1815.5	3508.0	3967.9
117.5°	722.2	857.5	1733.4	3290.7	3802.8
120°	773.2	903.8	1692.0	3134.8	3660.9
122.5°	817.9	946.9	1661.7	2975.4	3499.9
125°	878.9	1009.4	1630.2	2755.3	3242.4
127.5°	937.5	1066.1	1610.3	2561.2	2996.1
130°	972.5	1101.1	1602.3	2450.0	2831.9
132.5°	1007.6	1134.7	1594.3	2352.0	2702.8
135°	1058.2	1181.0	1584.4	2222.8	2517.0
137.5°	1106.5	1224.2	1579.2	2113.2	2354.8
140°	1139.9	1253.0	1574.4	2045.7	2263.9
142.5°	1175.0	1280.2	1571.2	1982.7	2166.7
145°	1223.6	1319.1	1564.4	1900.4	2040.7
147.5°	1276.2	1359.3	1557.6	1831.2	1941.5
150°	1311.3	1383.4	1554.5	1787.7	1879.3
152.5°	1343.2	1406.0	1552.9	1752.3	1826.7
155°	1389.0	1439.7	1550.5	1705.2	1759.7
157.5°	1429.3	1468.7	1550.9	1672.1	1708.7
160°	1454.8	1487.9	1552.5	1652.7	1680.0
162.5°	1477.1	1504.0	1554.1	1636.6	1656.1
165°	1506.6	1524.2	1556.5	1618.4	1626.2
167.5°	1530.5	1540.7	1558.4	1604.4	1607.5
170°	1546.5	1550.4	1558.4	1596.3	1596.3
172.5°	1556.1	1556.8	1560.0	1588.3	1588.3
175°	1566.4	1564.5	1558.4	1580.3	1576.4
177.5°	1570.8	1567.7	1559.6	1572.3	1569.2
180°	1564.4	1564.4	1564.4	1564.4	1564.4

(END OF REPORT)