

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

Brand: CORELITE

Report Number: P853549

Luminaire Tested: SQ2-BBM-125U-050D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853549
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G3-2104-222-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-BBM-125U-050D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

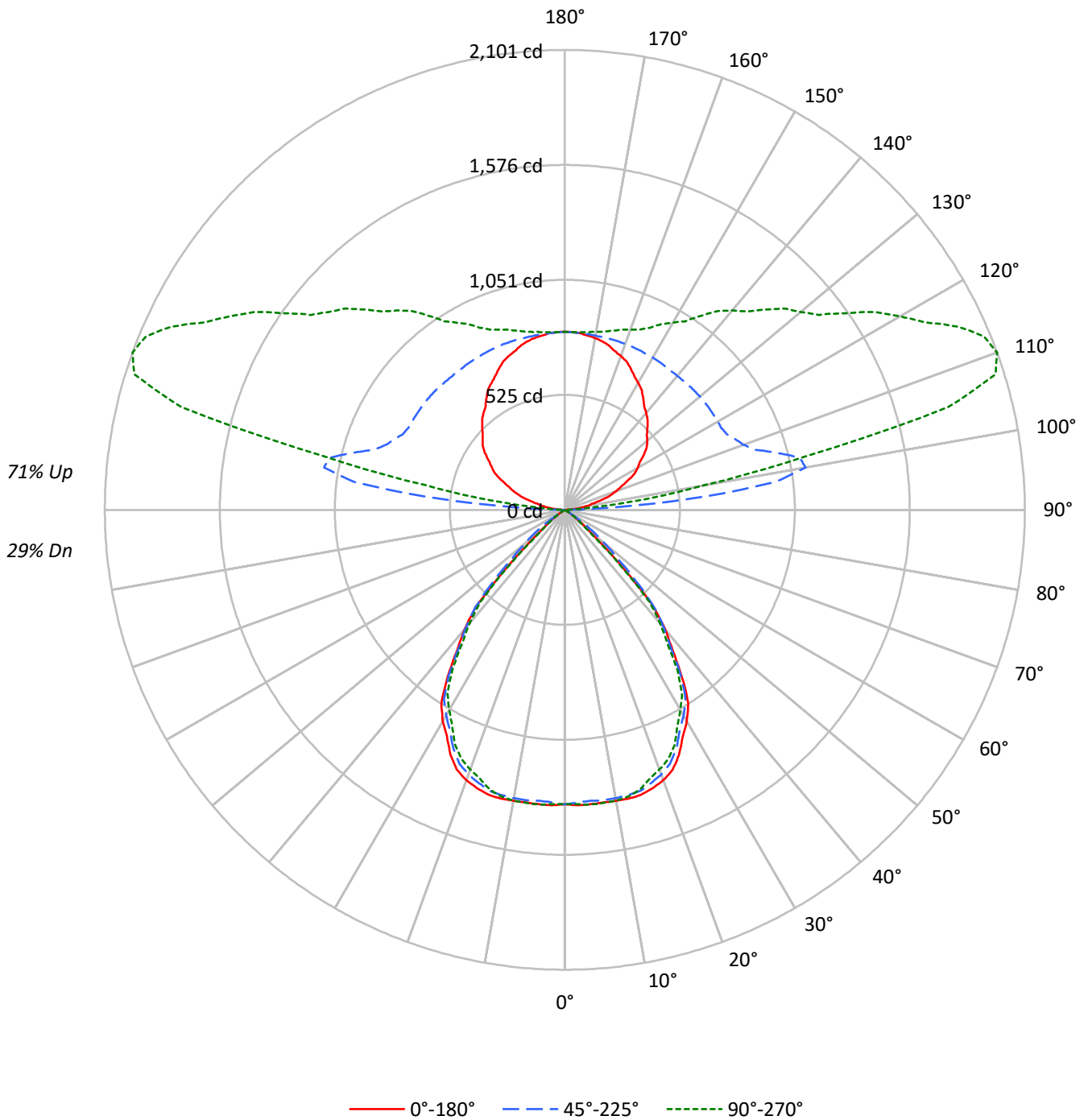
Lumens per Lamp: N/A
Luminaire Lumens: 7025.0 lumens
Efficiency: N/A
Efficacy: 113.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.17 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 62
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29				
1	94	90	87	84	84	81	78	76	64	62	61	48	47	46	34	33	33	26				
2	87	80	75	71	78	72	68	64	58	55	52	44	42	41	31	30	30	24				
3	80	72	65	60	72	65	59	55	52	48	45	40	38	36	29	28	27	22				
4	74	64	57	52	66	58	52	48	47	43	40	36	34	32	27	25	24	20				
5	68	58	50	45	61	52	46	42	42	38	35	33	30	28	25	23	22	18				
6	63	52	45	40	57	47	41	37	39	34	31	30	28	25	23	21	20	17				
7	58	47	40	35	52	43	37	33	35	31	28	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°	21723	21723	21723
5°	21870	21627	21903
10°	22123	21927	22107
15°	22522	22221	22121
20°	22584	22103	21691
25°	21991	21455	21116
30°	20775	20215	19675
35°	18415	18199	17686
40°	15032	14821	14231
45°	8862	10460	8245
50°	2989	5830	2663
55°	1013	2083	1070
60°	97	614	32
65°	0	38	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 10460 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.5	1.8
10°-20°	376.3	5.4
20°-30°	553.7	7.9
30°-40°	565.8	8.1
40°-50°	325.3	4.6
50°-60°	56.9	0.8
60°-70°	2.1	0.0
70°-80°	0.0	0.0
80°-90°	1.2	0.0
90°-100°	311.0	4.4
100°-110°	1012.4	14.4
110°-120°	1001.4	14.3
120°-130°	818.4	11.6
130°-140°	668.9	9.5
140°-150°	521.0	7.4
150°-160°	375.5	5.3
160°-170°	229.5	3.3
170°-180°	77.4	1.1
0°-30°	1058.6	15.1
0°-40°	1624.3	23.1
0°-60°	2006.5	28.6
0°-90°	2009.7	28.6
90°-120°	2324.8	33.1
90°-150°	4333.0	61.7
90°-180°	5015.0	71.4
0°-180°	7025.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1345	1345	1345	1345	1345	
5°	1349	1346	1334	1353	1351	129
15°	1347	1359	1329	1330	1323	380
25°	1234	1245	1204	1191	1185	564
35°	934	939	923	908	897	576
45°	388	452	458	434	361	304
55°	36	43	74	42	38	41
65°	0	0	1	0	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	3	7	6	6	2
95°	42	128	570	203	125	49
105°	172	248	1003	1916	1814	183
115°	318	380	817	1684	1981	315
125°	442	493	806	1329	1567	393
135°	534	590	802	1147	1294	412
145°	624	670	800	988	1082	391
155°	712	735	805	885	918	328
165°	777	784	807	837	847	219
175°	810	810	810	816	814	77
180°	813	813	813	813	813	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1345.4	1345.4	1345.4	1345.4	1345.4
2.5°	1351.0	1347.9	1337.4	1349.3	1346.2
5°	1349.4	1346.5	1334.4	1353.3	1351.4
7.5°	1348.6	1346.2	1338.2	1354.7	1350.8
10°	1349.4	1349.4	1337.4	1352.3	1348.4
12.5°	1351.0	1354.9	1335.0	1346.7	1341.2
15°	1347.4	1359.1	1329.4	1330.2	1323.4
17.5°	1332.8	1348.6	1308.0	1298.3	1288.0
20°	1314.4	1331.0	1286.4	1271.2	1262.4
22.5°	1286.4	1302.2	1255.2	1242.3	1232.8
25°	1234.4	1245.1	1204.3	1191.2	1185.3
27.5°	1166.3	1171.8	1136.3	1122.7	1112.9
30°	1114.3	1114.3	1084.3	1069.0	1055.3
32.5°	1049.5	1046.4	1026.7	1009.0	996.1
35°	934.3	939.2	923.3	908.0	897.3
37.5°	806.8	811.5	795.2	777.9	770.4
40°	713.2	717.1	703.2	685.0	675.2
42.5°	598.0	619.1	606.4	586.5	573.6
45°	388.1	451.7	458.1	434.5	361.1
47.5°	202.3	268.8	317.7	242.6	170.0
50°	119.0	162.1	232.1	132.4	106.0
52.5°	76.6	95.4	163.2	84.7	71.6
55°	36.0	42.9	74.0	41.9	38.0
57.5°	13.4	20.1	33.4	20.3	14.6
60°	3.0	8.9	19.0	5.9	1.0
62.5°	0.6	2.6	11.0	1.2	0.2
65°	0.0	0.0	1.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.6	1.4	1.2	1.2
90°	0.0	2.9	7.0	6.0	6.0
92.5°	14.4	51.7	165.4	54.5	42.0
95°	42.0	128.0	569.9	203.2	125.0
97.5°	79.0	166.6	967.3	589.1	359.6
100°	103.0	189.0	1116.9	995.9	645.9
102.5°	130.2	213.1	1098.5	1473.4	1120.3
105°	172.0	248.2	1002.9	1915.5	1813.8
107.5°	217.2	288.9	912.1	1953.8	2061.6
110°	250.0	315.5	868.9	1906.2	2100.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	277.2	341.9	841.7	1820.3	2071.2
115°	318.0	379.6	816.9	1683.6	1980.8
117.5°	360.0	415.5	807.3	1558.3	1854.2
120°	384.0	438.7	804.9	1481.3	1767.8
122.5°	407.2	461.1	805.7	1414.5	1681.4
125°	441.9	492.8	805.9	1329.2	1566.8
127.5°	471.7	523.8	805.7	1265.4	1463.4
130°	490.9	543.7	804.9	1228.9	1405.8
132.5°	507.7	562.9	804.1	1195.0	1361.0
135°	533.9	589.7	801.9	1147.2	1293.9
137.5°	559.5	615.7	799.7	1098.6	1228.9
140°	577.9	631.7	798.9	1065.7	1188.9
142.5°	595.5	647.0	798.9	1034.2	1144.1
145°	623.9	669.9	799.9	988.0	1081.9
147.5°	651.5	691.4	801.3	948.7	1021.3
150°	669.9	705.1	802.9	925.3	986.9
152.5°	688.3	717.3	803.7	907.4	956.5
155°	711.9	735.4	804.9	884.7	917.9
157.5°	734.3	751.1	806.1	867.8	891.1
160°	747.9	761.6	806.9	857.3	875.9
162.5°	759.9	770.5	806.9	848.4	862.3
165°	776.9	783.8	806.9	837.1	846.9
167.5°	788.9	793.2	807.1	828.6	833.7
170°	796.9	798.9	807.9	823.0	824.9
172.5°	802.5	803.7	809.5	819.7	819.3
175°	809.9	809.9	809.9	815.9	813.9
177.5°	812.9	812.1	811.3	815.2	812.1
180°	812.9	812.9	812.9	812.9	812.9



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00