

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: P853551

Luminaire Tested: SQ2-BBM-125U-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853551
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G3-2104-222-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-BBM-125U-075D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

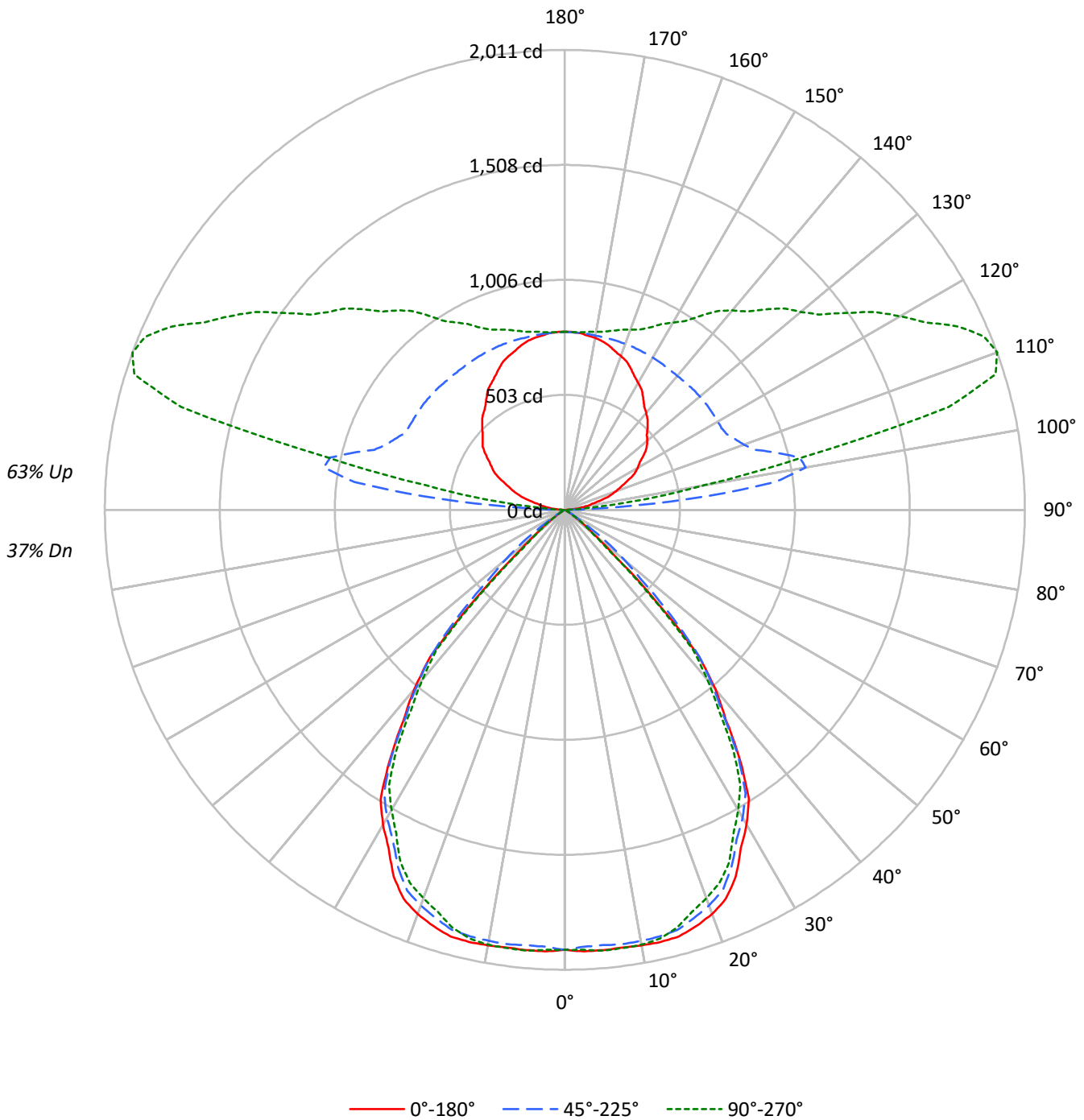
Lumens per Lamp: N/A
Luminaire Lumens: 7679.0 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.17 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 71.5
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				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	94	94	94	94	76	76	76	60	60	60	45	45	45	37
1	96	93	90	87	88	85	82	79	69	67	66	55	54	53	42	41	40	35
2	89	83	78	73	81	76	71	68	62	59	57	50	48	46	39	38	37	31
3	82	74	68	63	75	68	63	58	56	53	50	46	43	41	36	34	33	29
4	76	67	60	55	69	61	56	51	51	47	44	42	39	37	33	31	30	26
5	70	60	53	48	64	56	49	45	47	42	39	38	35	33	31	29	27	24
6	65	55	47	42	60	50	44	40	43	38	35	35	32	30	28	26	25	22
7	61	50	43	38	55	46	40	35	39	34	31	32	29	27	26	24	23	20
8	57	45	39	34	52	42	36	32	36	31	28	30	27	24	24	22	21	18
9	53	42	35	30	48	39	33	29	33	29	25	28	25	22	23	21	19	17
10	49	38	32	28	45	36	30	26	31	26	23	26	23	20	21	19	17	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	31068	31068	31068
5°	31311	30968	31358
10°	31704	31373	31657
15°	32276	31793	31632
20°	32318	31639	31060
25°	31518	30713	30284
30°	29628	28981	28247
35°	26296	26087	25310
40°	21566	21201	20409
45°	12858	15120	12065
50°	4014	8390	3795
55°	1517	2981	1517
60°	94	840	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: 15120 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.0	2.4
10°-20°	538.9	7.0
20°-30°	792.8	10.3
30°-40°	810.3	10.6
40°-50°	466.8	6.1
50°-60°	80.5	1.0
60°-70°	2.9	0.0
70°-80°	0.0	0.0
80°-90°	1.1	0.0
90°-100°	297.7	3.9
100°-110°	969.3	12.6
110°-120°	958.8	12.5
120°-130°	783.5	10.2
130°-140°	640.4	8.3
140°-150°	498.8	6.5
150°-160°	359.5	4.7
160°-170°	219.7	2.9
170°-180°	74.1	1.0
0°-30°	1515.7	19.7
0°-40°	2326.0	30.3
0°-60°	2873.3	37.4
0°-90°	2877.4	37.5
90°-120°	2225.8	29.0
90°-150°	4148.5	54.0
90°-180°	4802.0	62.5
0°-180°	7679.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1924	1924	1924	1924	1924	
5°	1932	1927	1911	1937	1935	184
15°	1931	1947	1902	1905	1892	544
25°	1769	1785	1724	1706	1700	807
35°	1334	1344	1324	1298	1284	824
45°	563	647	662	625	528	436
55°	54	61	106	60	54	57
65°	0	0	1	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	3	7	6	6	2
95°	40	123	546	194	120	47
105°	165	238	960	1834	1737	176
115°	304	363	782	1612	1896	301
125°	423	472	772	1273	1500	377
135°	511	565	768	1098	1239	395
145°	597	641	766	946	1036	374
155°	682	704	771	847	879	314
165°	744	750	772	802	811	209
175°	775	775	775	781	779	74
180°	778	778	778	778	778	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1924.2	1924.2	1924.2	1924.2	1924.2
2.5°	1932.6	1927.4	1911.9	1929.5	1925.7
5°	1931.9	1927.2	1910.7	1936.6	1934.8
7.5°	1930.7	1927.5	1915.9	1937.2	1932.5
10°	1933.8	1932.9	1913.6	1935.6	1930.9
12.5°	1935.3	1941.2	1911.3	1928.6	1920.1
15°	1930.9	1946.9	1902.0	1904.6	1892.4
17.5°	1909.3	1931.9	1872.2	1861.2	1843.9
20°	1880.9	1907.2	1841.4	1822.8	1807.7
22.5°	1840.8	1864.9	1802.1	1778.9	1766.9
25°	1769.2	1785.2	1724.0	1706.5	1699.9
27.5°	1667.7	1672.3	1626.2	1604.4	1595.9
30°	1589.2	1589.2	1554.5	1531.1	1515.1
32.5°	1497.6	1495.3	1470.6	1444.8	1428.8
35°	1334.1	1344.5	1323.5	1298.2	1284.1
37.5°	1157.2	1161.2	1145.3	1118.0	1106.2
40°	1023.2	1024.2	1005.9	986.2	968.3
42.5°	866.9	885.9	868.8	837.8	830.5
45°	563.1	646.9	662.2	625.4	528.4
47.5°	283.0	387.3	452.6	351.5	248.9
50°	159.8	221.9	334.0	185.9	151.1
52.5°	106.7	134.1	231.6	121.6	101.8
55°	53.9	61.4	105.9	59.6	53.9
57.5°	18.3	28.5	46.0	29.4	20.2
60°	2.9	12.3	26.0	9.4	1.0
62.5°	0.6	3.2	16.0	2.6	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	1.3	1.1	1.1
90°	0.0	2.8	6.7	5.7	5.7
92.5°	13.8	49.5	158.3	52.2	40.2
95°	40.2	122.6	545.7	194.5	119.7
97.5°	75.6	159.5	926.1	564.0	344.2
100°	98.6	181.0	1069.3	953.5	618.4
102.5°	124.6	204.0	1051.7	1410.7	1072.6
105°	164.7	237.7	960.2	1833.9	1736.6
107.5°	207.9	276.6	873.3	1870.6	1973.8
110°	239.3	302.0	831.9	1825.0	2011.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	265.4	327.3	805.9	1742.8	1983.0
115°	304.4	363.4	782.1	1611.9	1896.4
117.5°	344.6	397.8	772.9	1492.0	1775.2
120°	367.6	420.0	770.6	1418.3	1692.5
122.5°	389.8	441.5	771.4	1354.3	1609.8
125°	423.1	471.8	771.6	1272.6	1500.1
127.5°	451.7	501.5	771.4	1211.5	1401.1
130°	470.0	520.6	770.6	1176.5	1346.0
132.5°	486.1	538.9	769.9	1144.1	1303.1
135°	511.2	564.6	767.8	1098.3	1238.8
137.5°	535.7	589.4	765.7	1051.8	1176.5
140°	553.3	604.8	764.9	1020.3	1138.2
142.5°	570.2	619.4	764.9	990.1	1095.3
145°	597.4	641.4	765.8	945.9	1035.8
147.5°	623.8	662.0	767.2	908.3	977.8
150°	641.4	675.1	768.7	885.9	944.9
152.5°	659.0	686.7	769.5	868.8	915.8
155°	681.6	704.1	770.6	847.0	878.8
157.5°	703.0	719.1	771.8	830.9	853.1
160°	716.1	729.2	772.5	820.8	838.6
162.5°	727.6	737.7	772.5	812.3	825.6
165°	743.8	750.4	772.5	801.5	810.8
167.5°	755.3	759.4	772.7	793.3	798.2
170°	763.0	764.8	773.5	787.9	789.8
172.5°	768.3	769.5	775.0	784.8	784.4
175°	775.4	775.4	775.4	781.1	779.2
177.5°	778.3	777.5	776.8	780.5	777.5
180°	778.3	778.3	778.3	778.3	778.3



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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	0.09	1.54	0.00	0.00	0.00	0.00	1.16
	3H	0.00	0.00	0.00	0.00	1.30	0.00	0.00	0.00	0.00	0.92
	4H	0.00	0.00	0.00	0.00	1.16	0.00	0.00	0.00	0.00	0.78
	6H	0.00	0.00	0.00	0.00	1.02	0.00	0.00	0.00	0.00	0.64
	8H	0.00	0.00	0.00	0.00	0.94	0.00	0.00	0.00	0.00	0.56
	12H	0.00	0.00	0.00	0.00	0.87	0.00	0.00	0.00	0.00	0.49
4H	2H	0.00	0.00	0.00	0.00	1.17	0.00	0.00	0.00	0.00	0.79
	3H	0.00	0.00	0.00	0.00	0.91	0.00	0.00	0.00	0.00	0.53
	4H	0.00	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.00	0.39
	6H	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.00	0.23
	8H	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.15
	12H	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.06
8H	4H	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.15
	6H	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00	0.01
	8H	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.06
	6H	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00