

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: P853515

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

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853515
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G3-2104-222-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-BBM-075U-075D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

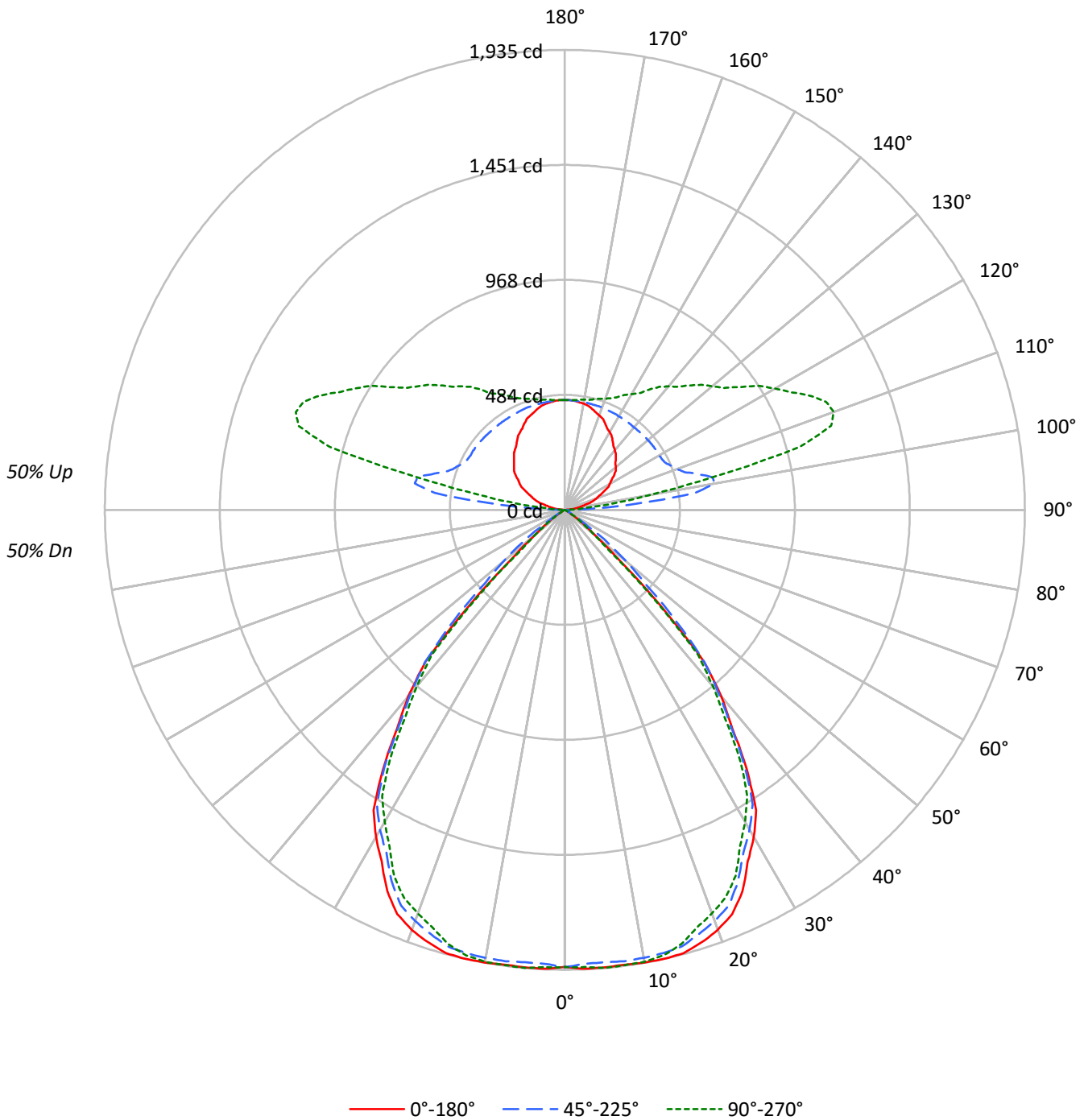
Lumens per Lamp: N/A
Luminaire Lumens: 5739.2 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.17 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 50.9
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	100	96	93	90	92	89	87	84	76	74	72	64	63	62	53	52	51	46
2	93	86	81	77	86	80	76	72	69	66	63	59	57	55	49	48	47	42
3	86	78	72	67	79	73	67	63	63	59	56	54	51	49	45	44	42	38
4	80	71	64	59	74	66	60	56	57	53	50	49	46	44	42	40	38	35
5	74	64	57	52	69	60	54	49	53	48	44	46	42	40	39	37	35	32
6	69	58	51	46	64	55	49	44	48	43	40	42	38	36	36	34	32	29
7	64	53	46	41	60	50	44	40	44	40	36	39	35	32	34	31	29	27
8	60	49	42	37	56	46	40	36	41	36	33	36	32	30	31	29	27	24
9	56	45	38	34	52	43	37	32	38	33	30	33	30	27	29	27	25	23
10	53	42	35	31	49	39	34	30	35	30	27	31	28	25	27	25	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	31065	31065	31065
5°	31308	30964	31355
10°	31701	31370	31654
15°	32272	31789	31629
20°	32314	31636	31057
25°	31515	30709	30280
30°	29625	28980	28243
35°	26294	26085	25306
40°	21564	21199	20407
45°	12855	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	3.2
10°-20°	538.8	9.4
20°-30°	792.7	13.8
30°-40°	810.3	14.1
40°-50°	466.8	8.1
50°-60°	80.5	1.4
60°-70°	2.9	0.1
70°-80°	0.0	0.0
80°-90°	0.6	0.0
90°-100°	174.9	3.0
100°-110°	579.7	10.1
110°-120°	575.3	10.0
120°-130°	468.6	8.2
130°-140°	380.8	6.6
140°-150°	295.8	5.2
150°-160°	213.1	3.7
160°-170°	130.5	2.3
170°-180°	44.1	0.8
0°-30°	1515.5	26.4
0°-40°	2325.8	40.5
0°-60°	2873.0	50.1
0°-90°	2876.5	50.1
90°-120°	1329.9	23.2
90°-150°	2475.1	43.1
90°-180°	2863.0	49.9
0°-180°	5739.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1924	1924	1924	1924	1924	
5°	1932	1927	1910	1936	1935	184
15°	1931	1947	1902	1904	1892	544
25°	1769	1785	1724	1706	1700	807
35°	1334	1344	1323	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	1	3	4	4	1
95°	25	74	317	113	76	28
105°	102	144	580	1094	1023	107
115°	181	216	467	972	1137	179
125°	253	281	458	764	901	225
135°	302	333	455	656	740	234
145°	351	378	454	564	618	220
155°	401	415	457	504	523	185
165°	440	445	458	477	482	124
175°	460	460	461	464	463	44
180°	462	462	462	462	462	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1924.0	1924.0	1924.0	1924.0	1924.0
2.5°	1932.4	1927.2	1911.7	1929.3	1925.5
5°	1931.7	1927.0	1910.5	1936.4	1934.6
7.5°	1930.5	1927.3	1915.7	1937.0	1932.3
10°	1933.6	1932.7	1913.4	1935.4	1930.7
12.5°	1935.1	1941.0	1911.1	1928.4	1919.9
15°	1930.7	1946.7	1901.8	1904.4	1892.2
17.5°	1909.2	1931.7	1872.0	1861.0	1843.7
20°	1880.7	1907.0	1841.2	1822.6	1807.5
22.5°	1840.6	1864.7	1801.9	1778.8	1766.7
25°	1769.0	1785.0	1723.8	1706.3	1699.7
27.5°	1667.6	1672.1	1626.0	1604.2	1595.8
30°	1589.0	1589.0	1554.4	1530.9	1514.9
32.5°	1497.4	1495.2	1470.5	1444.7	1428.7
35°	1334.0	1344.3	1323.4	1298.1	1283.9
37.5°	1157.1	1161.0	1145.1	1117.9	1106.1
40°	1023.1	1024.0	1005.8	986.1	968.2
42.5°	866.8	885.8	868.7	837.8	830.4
45°	563.0	646.8	662.2	625.3	528.4
47.5°	283.0	387.2	452.6	351.5	248.9
50°	159.8	221.9	334.0	185.9	151.1
52.5°	106.6	134.1	231.6	121.6	101.8
55°	53.9	61.4	105.9	59.5	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	0.2	0.6	0.8	0.8
90°	0.0	0.9	2.9	3.8	3.8
92.5°	7.7	29.6	87.1	28.2	23.7
95°	24.9	73.6	316.9	113.1	75.6
97.5°	45.8	96.7	553.1	322.6	203.9
100°	60.3	109.0	640.4	550.1	364.7
102.5°	76.4	123.6	635.1	840.6	635.1
105°	101.5	144.5	580.1	1094.5	1023.3
107.5°	127.1	165.5	527.5	1120.3	1174.4
110°	141.7	180.1	500.7	1094.8	1204.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	157.0	194.6	484.6	1049.5	1189.0
115°	180.9	216.5	467.2	972.5	1137.3
117.5°	204.7	236.3	460.8	899.0	1071.8
120°	219.2	250.1	458.5	852.9	1020.5
122.5°	232.2	262.4	458.5	815.1	969.9
125°	252.7	280.8	458.5	764.2	900.8
127.5°	269.6	297.1	457.4	725.6	842.4
130°	279.5	308.5	456.6	703.1	808.0
132.5°	288.7	318.5	455.9	684.5	778.9
135°	302.5	333.4	454.7	655.7	740.0
137.5°	317.4	347.2	453.6	628.0	702.3
140°	327.4	356.4	452.8	609.4	677.8
142.5°	336.6	364.9	453.6	590.9	651.7
145°	351.3	377.5	453.8	564.1	617.5
147.5°	367.2	389.1	453.9	541.4	581.1
150°	377.2	396.8	454.7	528.2	561.9
152.5°	386.4	405.3	455.5	517.4	544.3
155°	401.1	415.1	456.6	504.0	522.7
157.5°	415.5	426.3	457.8	494.5	507.7
160°	423.1	432.5	458.5	487.5	497.8
162.5°	430.8	437.9	458.5	482.9	490.9
165°	440.4	445.0	458.5	476.8	481.5
167.5°	449.2	451.6	459.5	471.4	473.9
170°	453.8	454.7	459.5	469.1	470.0
172.5°	456.8	457.8	460.3	466.8	467.0
175°	460.5	460.5	461.4	464.3	463.3
177.5°	462.4	462.4	461.6	463.1	461.6
180°	462.4	462.4	462.4	462.4	462.4



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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	0.43	0.72	1.41	2.69	0.00	0.05	0.33	1.02	2.31
	3H	0.00	0.16	0.54	1.15	2.45	0.00	0.00	0.15	0.76	2.06
	4H	0.00	0.01	0.44	1.01	2.32	0.00	0.00	0.06	0.62	1.93
	6H	0.00	0.00	0.34	0.85	2.18	0.00	0.00	0.00	0.47	1.79
	8H	0.00	0.00	0.28	0.78	2.10	0.00	0.00	0.00	0.39	1.71
	12H	0.00	0.00	0.23	0.68	2.03	0.00	0.00	0.00	0.30	1.64
4H	2H	0.00	0.02	0.45	1.01	2.33	0.00	0.00	0.07	0.63	1.94
	3H	0.00	0.00	0.26	0.74	2.06	0.00	0.00	0.00	0.35	1.68
	4H	0.00	0.00	0.15	0.57	1.92	0.00	0.00	0.00	0.19	1.54
	6H	0.00	0.00	0.05	0.42	1.77	0.00	0.00	0.00	0.03	1.38
	8H	0.00	0.00	0.00	0.32	1.68	0.00	0.00	0.00	0.00	1.30
	12H	0.00	0.00	0.00	0.23	1.59	0.00	0.00	0.00	0.00	1.21
8H	4H	0.00	0.00	0.00	0.32	1.68	0.00	0.00	0.00	0.00	1.30
	6H	0.00	0.00	0.00	0.18	1.54	0.00	0.00	0.00	0.00	1.15
	8H	0.00	0.00	0.00	0.07	1.45	0.00	0.00	0.00	0.00	1.06
	12H	0.00	0.00	0.00	0.00	1.39	0.00	0.00	0.00	0.00	1.00
12H	4H	0.00	0.00	0.00	0.23	1.59	0.00	0.00	0.00	0.00	1.21
	6H	0.00	0.00	0.00	0.07	1.45	0.00	0.00	0.00	0.00	1.06
	8H	0.00	0.00	0.00	0.00	1.39	0.00	0.00	0.00	0.00	1.00