

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: P853539

Luminaire Tested: SQ2-BBM-100U-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853539
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-12, G3-2104-222-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-BBM-100U-075D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

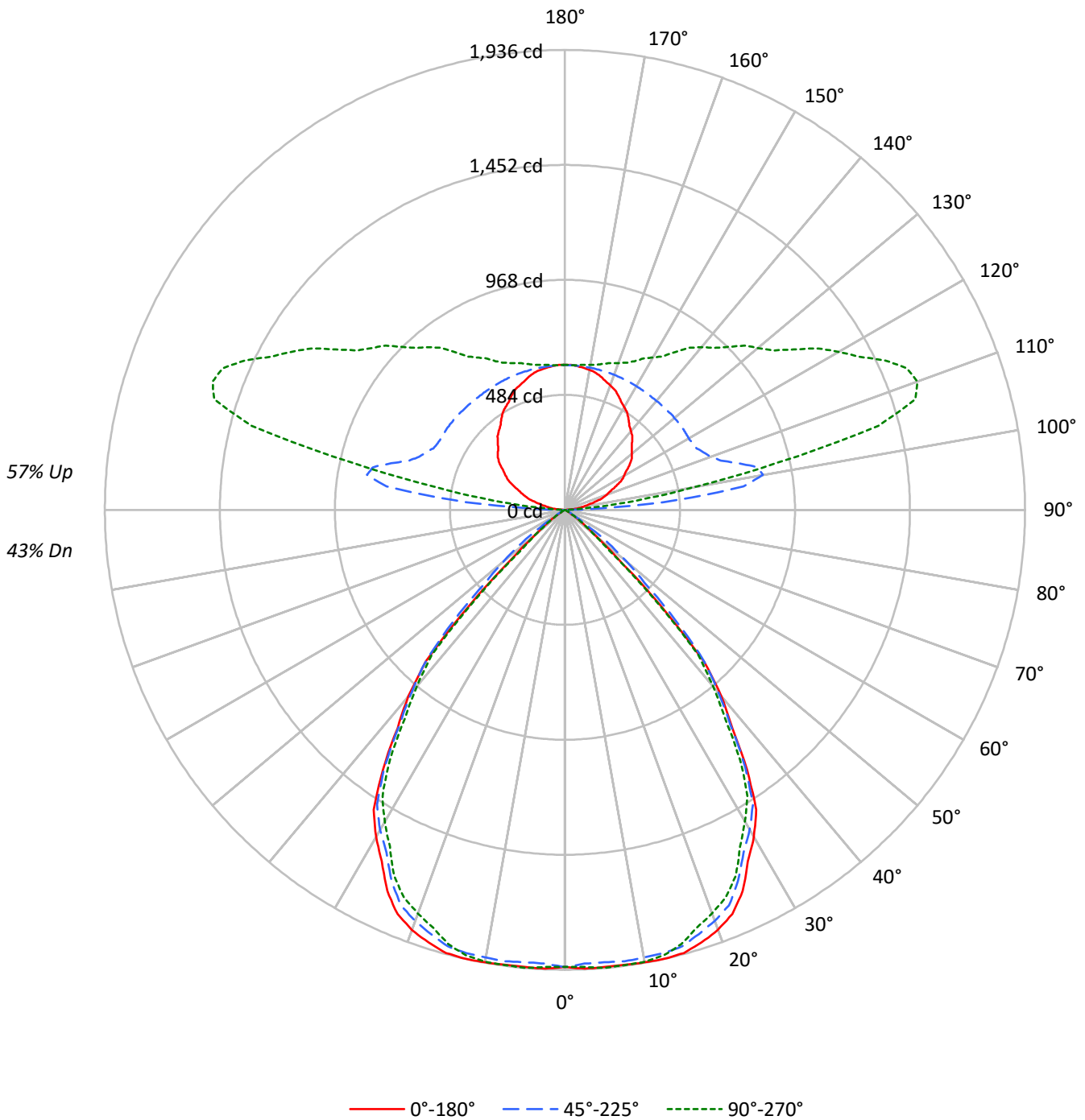
Lumens per Lamp: N/A
Luminaire Lumens: 6672.6 lumens
Efficiency: N/A
Efficacy: 110.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.17 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 60.2
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	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43
1	98	94	91	88	90	87	84	81	72	70	69	59	58	57	47	46	45	40
2	91	84	79	75	83	78	73	70	65	62	60	54	52	50	43	42	41	36
3	84	76	70	65	77	70	65	61	59	56	52	49	47	45	40	38	37	33
4	78	68	62	56	71	63	58	53	54	50	46	45	42	40	37	35	34	30
5	72	62	55	50	66	58	51	47	49	45	41	42	38	36	34	32	31	27
6	67	56	49	44	62	52	46	42	45	40	37	38	35	32	32	30	28	25
7	62	51	44	39	57	48	42	37	41	37	33	35	32	29	30	27	25	23
8	58	47	40	35	54	44	38	34	38	33	30	33	29	27	28	25	23	21
9	54	43	36	32	50	41	35	30	35	31	27	30	27	24	26	23	21	19
10	51	40	33	29	47	37	32	28	33	28	25	28	25	22	24	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	31074	31074	31074
5°	31318	30974	31365
10°	31713	31380	31665
15°	32284	31801	31641
20°	32325	31646	31067
25°	31525	30720	30291
30°	29636	28989	28253
35°	26302	26093	25316
40°	21572	21205	20415
45°	12860	15125	12070
50°	4014	8392	3798
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: 15125 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.0	2.8
10°-20°	539.0	8.1
20°-30°	793.0	11.9
30°-40°	810.5	12.1
40°-50°	467.0	7.0
50°-60°	80.5	1.2
60°-70°	2.9	0.0
70°-80°	0.0	0.0
80°-90°	1.4	0.0
90°-100°	254.6	3.8
100°-110°	770.1	11.5
110°-120°	751.8	11.3
120°-130°	614.3	9.2
130°-140°	501.5	7.5
140°-150°	390.4	5.9
150°-160°	281.4	4.2
160°-170°	172.3	2.6
170°-180°	58.2	0.9
0°-30°	1516.0	22.7
0°-40°	2326.6	34.9
0°-60°	2874.0	43.1
0°-90°	2878.3	43.1
90°-120°	1776.6	26.6
90°-150°	3282.7	49.2
90°-180°	3795.0	56.9
0°-180°	6672.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1925	1925	1925	1925	1925	
5°	1932	1928	1911	1937	1935	184
15°	1931	1947	1902	1905	1893	544
25°	1770	1786	1724	1707	1700	807
35°	1334	1345	1324	1298	1284	824
45°	563	647	662	626	529	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	2	12	7	6	1
95°	32	100	480	178	112	37
105°	134	188	756	1436	1365	141
115°	238	284	612	1266	1486	236
125°	333	370	603	1000	1176	296
135°	399	441	599	862	970	309
145°	466	501	599	742	811	292
155°	531	549	603	665	690	244
165°	581	588	606	629	636	164
175°	608	608	609	614	612	58
180°	610	610	610	610	610	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1924.6	1924.6	1924.6	1924.6	1924.6
2.5°	1933.1	1927.8	1912.3	1929.9	1926.2
5°	1932.3	1927.6	1911.1	1937.1	1935.2
7.5°	1931.2	1928.0	1916.3	1937.6	1932.9
10°	1934.3	1933.3	1914.0	1936.1	1931.4
12.5°	1935.8	1941.6	1911.7	1929.1	1920.6
15°	1931.4	1947.4	1902.5	1905.1	1892.9
17.5°	1909.8	1932.4	1872.6	1861.7	1844.3
20°	1881.3	1907.7	1841.8	1823.2	1808.1
22.5°	1841.2	1865.3	1802.5	1779.4	1767.3
25°	1769.6	1785.6	1724.4	1706.9	1700.3
27.5°	1668.1	1672.7	1626.5	1604.8	1596.3
30°	1589.6	1589.6	1554.9	1531.4	1515.4
32.5°	1497.9	1495.7	1471.0	1445.2	1429.2
35°	1334.4	1344.8	1323.8	1298.5	1284.4
37.5°	1157.5	1161.4	1145.5	1118.3	1106.4
40°	1023.5	1024.4	1006.1	986.5	968.6
42.5°	867.1	886.1	869.0	838.0	830.7
45°	563.2	647.0	662.4	625.5	528.6
47.5°	283.1	387.4	452.7	351.6	249.0
50°	159.8	222.0	334.1	186.0	151.2
52.5°	106.7	134.2	231.6	121.6	101.9
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	0.4	2.3	1.3	1.1
90°	0.0	1.9	11.5	6.7	5.7
92.5°	10.7	43.3	155.4	51.6	37.1
95°	31.6	99.9	480.5	177.5	112.0
97.5°	61.1	127.1	757.3	501.1	305.1
100°	79.4	144.0	846.1	818.0	549.4
102.5°	100.1	162.4	827.8	1147.3	914.7
105°	134.0	188.3	756.2	1436.0	1364.9
107.5°	166.2	218.0	687.2	1464.6	1547.0
110°	187.6	237.2	652.8	1428.6	1578.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	208.3	256.4	632.1	1368.3	1557.7
115°	238.3	284.2	611.6	1265.6	1486.5
117.5°	268.2	311.6	604.4	1169.4	1395.5
120°	288.1	329.3	602.1	1113.3	1330.5
122.5°	306.5	345.4	602.1	1063.9	1264.6
125°	333.1	369.6	603.0	999.5	1176.3
127.5°	354.7	392.5	602.1	950.8	1101.7
130°	368.5	407.8	602.1	922.9	1059.6
132.5°	380.8	420.8	601.3	897.4	1023.6
135°	399.1	441.3	599.2	862.0	969.6
137.5°	419.6	459.7	599.2	824.1	923.8
140°	432.6	471.9	599.2	799.5	894.0
142.5°	445.7	483.5	598.4	777.0	859.5
145°	466.1	500.8	599.2	741.5	810.7
147.5°	486.6	516.0	600.3	712.2	765.3
150°	499.6	526.8	601.1	695.9	740.8
152.5°	511.9	536.0	601.9	681.9	718.6
155°	531.2	549.0	603.0	664.8	690.1
157.5°	548.1	562.5	604.2	652.2	669.8
160°	558.0	570.2	604.9	644.5	657.6
162.5°	568.0	577.1	605.7	637.5	648.4
165°	581.0	587.5	605.9	629.0	636.5
167.5°	592.1	595.5	607.0	622.4	625.6
170°	598.2	600.1	607.8	619.3	620.2
172.5°	602.1	603.2	607.8	616.2	616.4
175°	607.8	607.8	608.8	613.5	611.6
177.5°	610.5	609.7	608.9	611.2	609.7
180°	609.7	609.7	609.7	609.7	609.7



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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	0.06	0.71	2.09	0.00	0.00	0.00	0.33	1.71
	3H	0.00	0.00	0.00	0.45	1.85	0.00	0.00	0.00	0.07	1.47
	4H	0.00	0.00	0.00	0.31	1.72	0.00	0.00	0.00	0.00	1.34
	6H	0.00	0.00	0.00	0.16	1.57	0.00	0.00	0.00	0.00	1.19
	8H	0.00	0.00	0.00	0.08	1.49	0.00	0.00	0.00	0.00	1.11
	12H	0.00	0.00	0.00	0.00	1.42	0.00	0.00	0.00	0.00	1.04
4H	2H	0.00	0.00	0.00	0.32	1.72	0.00	0.00	0.00	0.00	1.34
	3H	0.00	0.00	0.00	0.04	1.46	0.00	0.00	0.00	0.00	1.08
	4H	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00	0.00	0.94
	6H	0.00	0.00	0.00	0.00	1.16	0.00	0.00	0.00	0.00	0.78
	8H	0.00	0.00	0.00	0.00	1.08	0.00	0.00	0.00	0.00	0.70
	12H	0.00	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.61
8H	4H	0.00	0.00	0.00	0.00	1.08	0.00	0.00	0.00	0.00	0.70
	6H	0.00	0.00	0.00	0.00	0.94	0.00	0.00	0.00	0.00	0.56
	8H	0.00	0.00	0.00	0.00	0.85	0.00	0.00	0.00	0.00	0.47
	12H	0.00	0.00	0.00	0.00	0.78	0.00	0.00	0.00	0.00	0.41
12H	4H	0.00	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.61
	6H	0.00	0.00	0.00	0.00	0.85	0.00	0.00	0.00	0.00	0.47
	8H	0.00	0.00	0.00	0.00	0.78	0.00	0.00	0.00	0.00	0.41