

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: P853529

Luminaire Tested: SQ2-BBM-075D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853529
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-BBM-075D-940-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

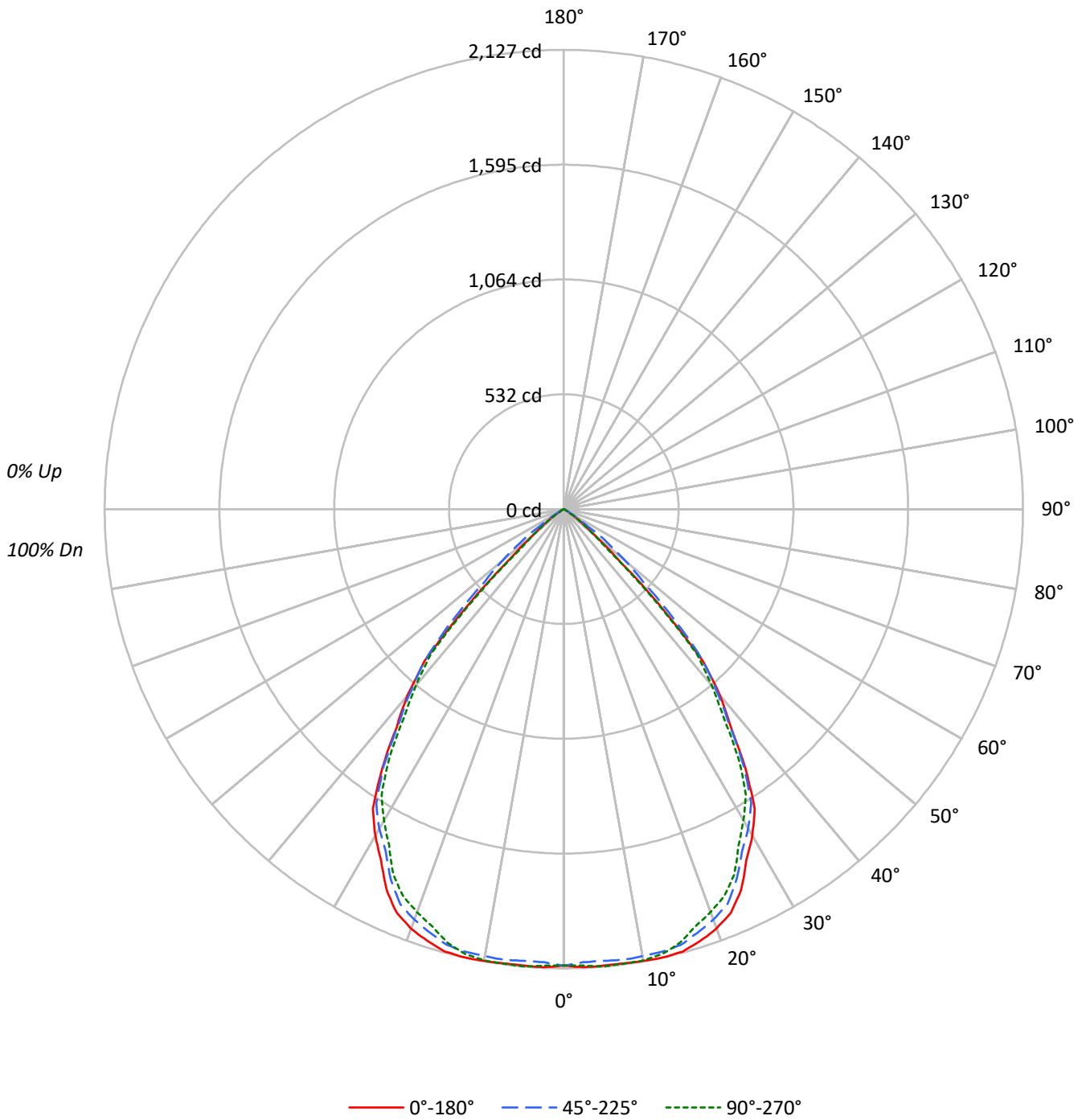
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3160.7 lumens
Efficiency: N/A
Efficacy: 114.5 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: Direct

Input Watts (W): 27.6
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	
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92	92	92	
2	106	101	96	93	104	99	95	92	96	92	90	93	90	88	90	88	86	84	84	84	
3	100	93	87	83	98	91	86	82	89	84	81	86	82	79	84	81	78	76	76	76	
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70	70	70	
5	88	79	72	67	86	78	72	67	76	70	66	74	69	66	72	68	65	63	63	63	
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58	58	58	
7	78	67	61	56	76	67	60	56	65	60	55	64	59	55	63	58	55	53	53	53	
8	73	63	56	51	72	62	55	51	61	55	51	60	54	51	59	54	50	49	49	49	
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45	45	45	
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	47	43	42	42	42	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	34140	34140	34140
5°	34407	34031	34459
10°	34841	34475	34788
15°	35468	34937	34761
20°	35514	34768	34132
25°	34636	33750	33278
30°	32559	31849	31040
35°	28897	28667	27813
40°	23699	23298	22428
45°	14129	16616	13260
50°	4411	9218	4172
55°	1666	3277	1666
60°	103	924	36
65°	0	42	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: 16616 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.2	6.4
10°-20°	592.2	18.7
20°-30°	871.2	27.6
30°-40°	890.5	28.2
40°-50°	513.0	16.2
50°-60°	88.4	2.8
60°-70°	3.2	0.1
70°-80°	0.0	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1665.6	52.7
0°-40°	2556.1	80.9
0°-60°	3157.5	99.9
0°-90°	3160.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3160.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2114	2114	2114	2114	2114	
5°	2123	2118	2100	2128	2126	203
15°	2122	2140	2090	2093	2080	597
25°	1944	1962	1894	1875	1868	887
35°	1466	1477	1454	1427	1411	906
45°	619	711	728	687	581	479
55°	59	68	116	65	59	63
65°	0	0	1	0	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2114.5	2114.5	2114.5	2114.5	2114.5
2.5°	2123.8	2118.0	2100.9	2120.3	2116.2
5°	2122.9	2117.8	2099.7	2128.2	2126.1
7.5°	2121.7	2118.1	2105.4	2128.7	2123.6
10°	2125.1	2124.0	2102.8	2127.0	2121.9
12.5°	2126.7	2133.2	2100.3	2119.3	2110.0
15°	2121.9	2139.5	2090.1	2093.0	2079.6
17.5°	2098.2	2123.0	2057.4	2045.3	2026.3
20°	2066.9	2095.8	2023.5	2003.0	1986.5
22.5°	2022.9	2049.3	1980.3	1954.9	1941.6
25°	1944.2	1961.8	1894.5	1875.3	1868.0
27.5°	1832.7	1837.6	1787.0	1763.1	1753.8
30°	1746.4	1746.4	1708.3	1682.5	1664.9
32.5°	1645.7	1643.2	1616.1	1587.7	1570.1
35°	1466.1	1477.4	1454.4	1426.6	1411.1
37.5°	1271.6	1276.0	1258.5	1228.6	1215.6
40°	1124.4	1125.4	1105.4	1083.8	1064.1
42.5°	952.6	973.5	954.7	920.7	912.6
45°	618.8	710.8	727.7	687.2	580.7
47.5°	311.0	425.6	497.4	386.3	273.5
50°	175.6	243.9	367.0	204.3	166.1
52.5°	117.2	147.4	254.5	133.6	111.9
55°	59.2	67.5	116.4	65.4	59.2
57.5°	20.1	31.3	50.6	32.3	22.2
60°	3.2	13.5	28.6	10.4	1.1
62.5°	0.6	3.5	17.6	2.9	0.2
65°	0.0	0.0	1.1	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	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



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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	4.28	5.42	4.65	5.73	6.04	3.90	5.03	4.27	5.35	5.66
	3H	4.12	5.11	4.50	5.44	5.81	3.74	4.72	4.12	5.06	5.42
	4H	4.03	4.94	4.43	5.29	5.68	3.65	4.56	4.05	4.91	5.30
	6H	3.93	4.77	4.35	5.14	5.53	3.55	4.38	3.97	4.76	5.15
	8H	3.88	4.66	4.31	5.06	5.47	3.50	4.28	3.93	4.68	5.08
	12H	3.83	4.58	4.26	4.96	5.39	3.44	4.20	3.88	4.58	5.01
4H	2H	4.03	4.95	4.44	5.30	5.69	3.65	4.57	4.06	4.92	5.31
	3H	3.86	4.59	4.27	5.00	5.41	3.48	4.21	3.89	4.62	5.03
	4H	3.75	4.40	4.19	4.82	5.27	3.37	4.02	3.81	4.44	4.89
	6H	3.65	4.21	4.12	4.66	5.13	3.27	3.83	3.74	4.28	4.75
	8H	3.58	4.10	4.06	4.55	5.03	3.20	3.72	3.67	4.17	4.64
	12H	3.52	3.98	4.01	4.46	4.94	3.14	3.59	3.63	4.08	4.56
8H	4H	3.58	4.10	4.06	4.55	5.03	3.20	3.72	3.67	4.17	4.64
	6H	3.46	3.88	3.97	4.38	4.87	3.08	3.50	3.59	4.00	4.49
	8H	3.39	3.76	3.91	4.28	4.78	3.00	3.38	3.53	3.90	4.40
	12H	3.33	3.66	3.85	4.16	4.74	2.95	3.28	3.47	3.78	4.36
12H	4H	3.52	3.98	4.01	4.46	4.94	3.14	3.59	3.63	4.08	4.56
	6H	3.39	3.76	3.91	4.28	4.78	3.01	3.38	3.53	3.90	4.40
	8H	3.33	3.66	3.85	4.16	4.74	2.95	3.28	3.47	3.78	4.36