

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: P845450

Luminaire Tested: SQ2R-BBM-075D-940-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845450
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P559649)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-BBM-075D-940-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - BLACK BAFFLE, WIDE 80-DEGREE OPTIC
750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

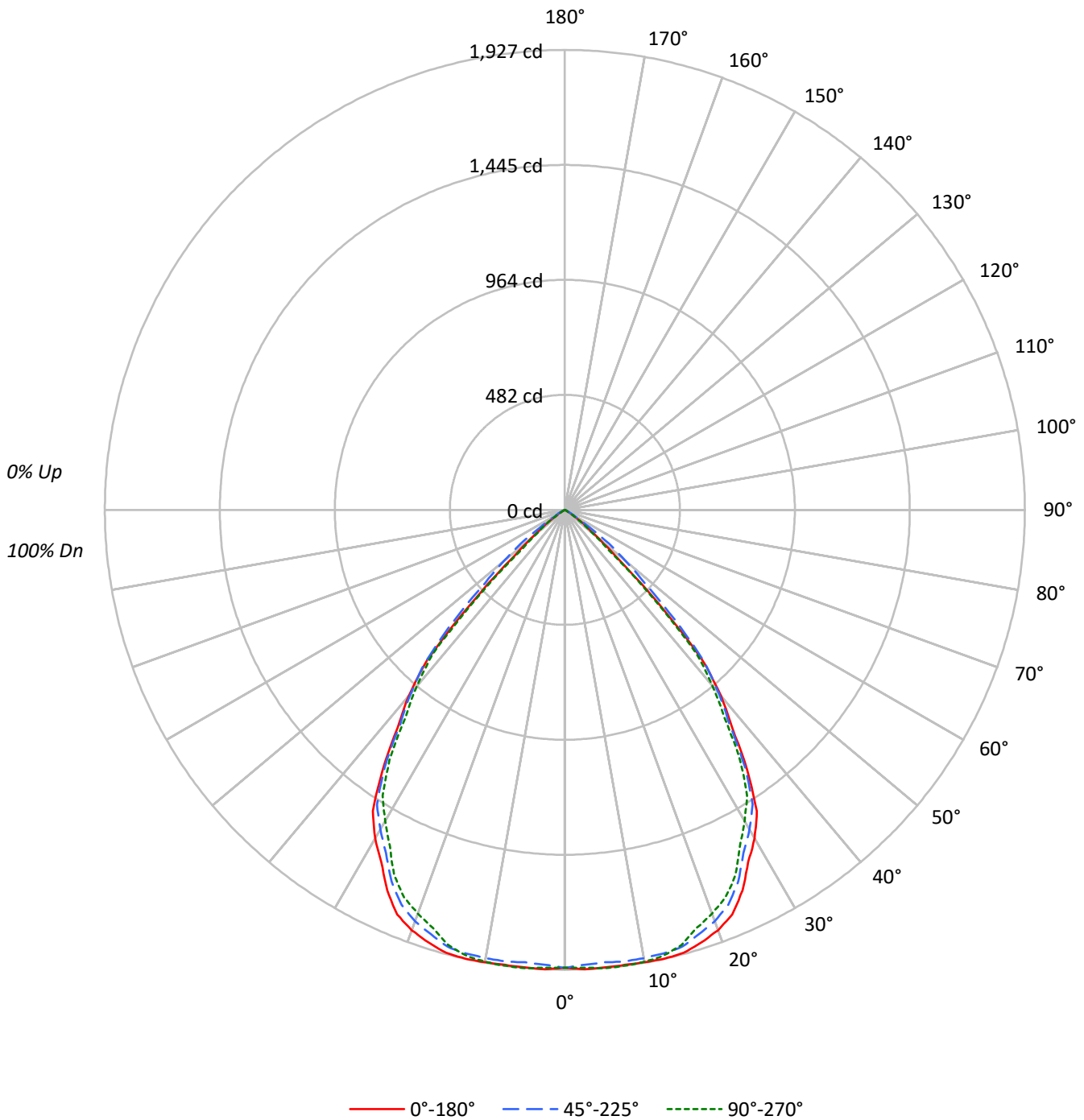
Lumens per Lamp: N/A
Luminaire Lumens: 2864.7 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.17 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.3
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92				92
2	106	101	96	93	104	99	95	92	96	92	90	93	90	88	90	88	86	84				84
3	100	93	87	83	98	91	86	82	89	84	81	86	82	79	84	81	78	76				76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70				70
5	88	79	72	67	86	78	72	67	76	70	66	74	69	66	72	68	65	63				63
6	83	73	66	61	81	72	65	61	70	65	60	69	64	60	67	63	60	58				58
7	78	67	61	56	76	67	60	56	65	59	55	64	59	55	63	58	55	53				53
8	73	63	56	51	72	62	55	51	61	55	51	60	54	51	59	54	50	49				49
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45				45
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	47	43	42				42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	30981	30981	30981
5°	31191	30845	31238
10°	31552	31272	31529
15°	32122	31692	31549
20°	32209	31524	30935
25°	31363	30601	30118
30°	29630	28832	28060
35°	26264	25955	25223
40°	21439	21138	20297
45°	12638	14920	11759
50°	4265	8314	3798
55°	1447	2973	1526
60°	139	875	45
65°	0	53	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: 14920 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.3	6.4
10°-20°	536.7	18.7
20°-30°	789.8	27.6
30°-40°	806.9	28.2
40°-50°	463.9	16.2
50°-60°	81.1	2.8
60°-70°	2.9	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°	1509.8	52.7
0°-40°	2316.7	80.9
0°-60°	2861.7	99.9
0°-90°	2864.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2864.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1919	1919	1919	1919	1919	
5°	1924	1920	1903	1930	1927	184
15°	1922	1938	1896	1897	1887	541
25°	1760	1776	1718	1699	1691	805
35°	1332	1340	1317	1295	1280	822
45°	554	644	653	620	515	433
55°	51	61	106	60	54	58
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°	1918.8	1918.8	1918.8	1918.8	1918.8
2.5°	1926.8	1922.4	1907.4	1924.4	1920.0
5°	1924.5	1920.4	1903.1	1930.2	1927.4
7.5°	1923.4	1920.1	1908.6	1932.1	1926.5
10°	1924.5	1924.5	1907.4	1928.7	1923.1
12.5°	1926.8	1932.4	1904.0	1920.7	1912.8
15°	1921.7	1938.4	1896.0	1897.1	1887.4
17.5°	1900.9	1923.4	1865.5	1851.8	1836.9
20°	1874.6	1898.3	1834.7	1813.0	1800.4
22.5°	1834.7	1857.2	1790.1	1771.9	1758.2
25°	1760.5	1775.9	1717.7	1699.0	1690.6
27.5°	1663.5	1671.3	1620.7	1601.3	1587.3
30°	1589.3	1589.3	1546.5	1524.6	1505.1
32.5°	1496.8	1492.4	1464.3	1439.1	1420.6
35°	1332.5	1339.5	1316.8	1295.1	1279.7
37.5°	1150.7	1157.4	1134.2	1109.4	1098.8
40°	1017.2	1022.8	1002.9	977.0	963.0
42.5°	852.8	882.9	864.8	836.4	818.0
45°	553.5	644.3	653.4	619.6	515.0
47.5°	288.5	383.3	453.1	346.1	242.5
50°	169.8	231.1	331.0	188.9	151.2
52.5°	109.3	136.1	232.8	120.8	102.1
55°	51.4	61.1	105.6	59.8	54.2
57.5°	19.1	28.5	47.6	29.0	20.8
60°	4.3	12.7	27.1	8.4	1.4
62.5°	0.9	3.7	15.7	1.7	0.3
65°	0.0	0.0	1.4	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	3.97	5.10	4.33	5.41	5.73	3.55	4.69	3.92	5.00	5.31
	3H	3.80	4.79	4.18	5.12	5.49	3.39	4.38	3.77	4.71	5.08
	4H	3.71	4.62	4.12	4.98	5.36	3.30	4.21	3.70	4.56	4.95
	6H	3.61	4.45	4.03	4.82	5.22	3.20	4.04	3.62	4.41	4.80
	8H	3.56	4.35	4.00	4.74	5.15	3.15	3.93	3.58	4.33	4.74
	12H	3.51	4.26	3.94	4.64	5.07	3.10	3.85	3.53	4.23	4.66
4H	2H	3.72	4.63	4.12	4.99	5.37	3.31	4.22	3.71	4.57	4.96
	3H	3.54	4.28	3.96	4.69	5.09	3.13	3.87	3.55	4.28	4.68
	4H	3.44	4.09	3.87	4.51	4.96	3.02	3.68	3.46	4.10	4.55
	6H	3.33	3.89	3.80	4.34	4.81	2.92	3.48	3.39	3.93	4.40
	8H	3.27	3.79	3.74	4.24	4.71	2.85	3.38	3.33	3.83	4.30
	12H	3.21	3.66	3.70	4.15	4.62	2.79	3.25	3.28	3.74	4.21
8H	4H	3.27	3.79	3.74	4.24	4.71	2.85	3.38	3.33	3.83	4.30
	6H	3.14	3.57	3.65	4.07	4.55	2.73	3.15	3.24	3.66	4.14
	8H	3.07	3.45	3.60	3.97	4.46	2.66	3.04	3.19	3.56	4.05
	12H	3.01	3.35	3.53	3.85	4.42	2.60	2.94	3.12	3.43	4.01
12H	4H	3.21	3.66	3.70	4.15	4.62	2.79	3.25	3.28	3.74	4.21
	6H	3.07	3.45	3.60	3.97	4.47	2.66	3.04	3.19	3.56	4.05
	8H	3.01	3.35	3.53	3.85	4.42	2.60	2.94	3.12	3.43	4.01