

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: P845458

Luminaire Tested: SQ2R-BBN-050D-935-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845458
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2308-130-1)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-BBN-050D-935-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - BLACK BAFFLE, NARROW 35-DEGREE OPTIC
500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

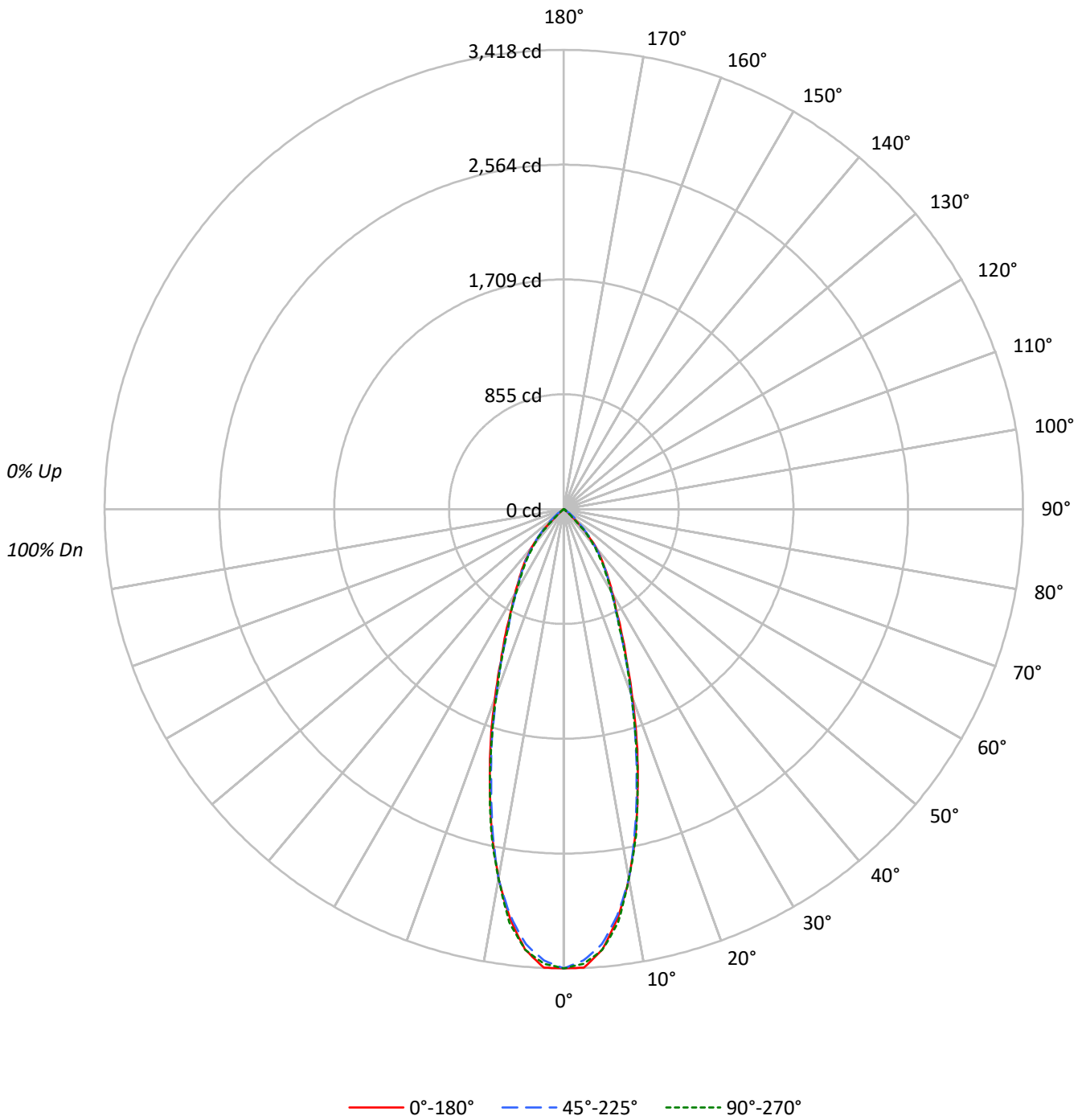
Lumens per Lamp: N/A
Luminaire Lumens: 1846.7 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Spacing Criteria (0/90/45): 0.59 / 0.59 / 0.62
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88
3	103	97	93	89	101	96	92	88	93	90	87	91	88	85	89	86	84	83
4	99	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	77
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73
6	90	81	75	71	88	80	75	71	79	74	71	78	73	70	76	73	70	68
7	86	77	71	67	84	76	71	67	75	70	67	74	69	66	73	69	66	65
8	82	73	67	63	81	72	67	63	71	66	63	70	66	63	69	65	62	61
9	78	69	64	60	77	69	63	60	68	63	59	67	62	59	66	62	59	58
10	75	66	60	57	74	65	60	57	65	60	56	64	59	56	63	59	56	55

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	55188	55188	55188
5°	53342	52683	53371
10°	45778	45809	45778
15°	35534	34967	35450
20°	25644	25115	25094
25°	18184	17459	17493
30°	13528	13183	13058
35°	10527	10259	10040
40°	7790	7594	7116
45°	3980	4880	3206
50°	867	2693	635
55°	242	1092	191
60°	39	220	19
65°	0	23	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: 4880 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.5	16.1
10°-20°	584.1	31.6
20°-30°	467.7	25.3
30°-40°	326.3	17.7
40°-50°	150.2	8.1
50°-60°	20.3	1.1
60°-70°	0.6	0.0
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°	1349.3	73.1
0°-40°	1675.6	90.7
0°-60°	1846.1	100.0
0°-90°	1846.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1846.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3418	3418	3418	3418	3418	
5°	3291	3273	3250	3291	3293	298
15°	2126	2154	2092	2121	2121	587
25°	1021	997	980	995	982	475
35°	534	534	520	511	509	334
45°	174	209	214	195	140	139
55°	9	14	39	11	7	10
65°	0	0	1	0	0	0
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°	3418.1	3418.1	3418.1	3418.1	3418.1
2.5°	3415.6	3399.6	3362.6	3396.5	3386.1
5°	3291.2	3273.3	3250.5	3290.6	3293.0
7.5°	3071.3	3077.4	3051.0	3102.7	3100.9
10°	2792.2	2796.6	2794.1	2808.9	2792.2
12.5°	2468.9	2489.2	2449.8	2473.8	2486.7
15°	2125.8	2153.5	2091.9	2121.4	2120.8
17.5°	1806.1	1803.6	1770.9	1779.0	1775.9
20°	1492.5	1488.2	1461.7	1457.4	1460.5
22.5°	1224.0	1215.9	1211.0	1198.7	1203.0
25°	1020.7	997.3	980.0	994.8	981.9
27.5°	842.7	843.3	828.5	830.3	835.3
30°	725.6	721.3	707.1	707.8	700.4
32.5°	621.5	626.5	608.0	603.7	596.3
35°	534.1	534.1	520.5	511.3	509.4
37.5°	449.7	449.1	438.6	426.3	421.9
40°	369.6	366.5	360.3	344.3	337.6
42.5°	278.4	289.5	283.4	267.3	256.2
45°	174.3	208.8	213.7	195.3	140.4
47.5°	85.0	125.0	151.5	105.9	54.2
50°	34.5	64.1	107.2	46.2	25.3
52.5°	16.6	27.7	72.7	22.2	13.6
55°	8.6	13.6	38.8	11.1	6.8
57.5°	3.7	6.8	16.6	5.5	3.1
60°	1.2	2.5	6.8	1.8	0.6
62.5°	0.0	0.6	2.5	0.6	0.0
65°	0.0	0.0	0.6	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00