

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: P845454

Luminaire Tested: SQ2R-BBM-125D-930-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845454
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-125D-930-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - BLACK BAFFLE, WIDE 80-DEGREE OPTIC
1250 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

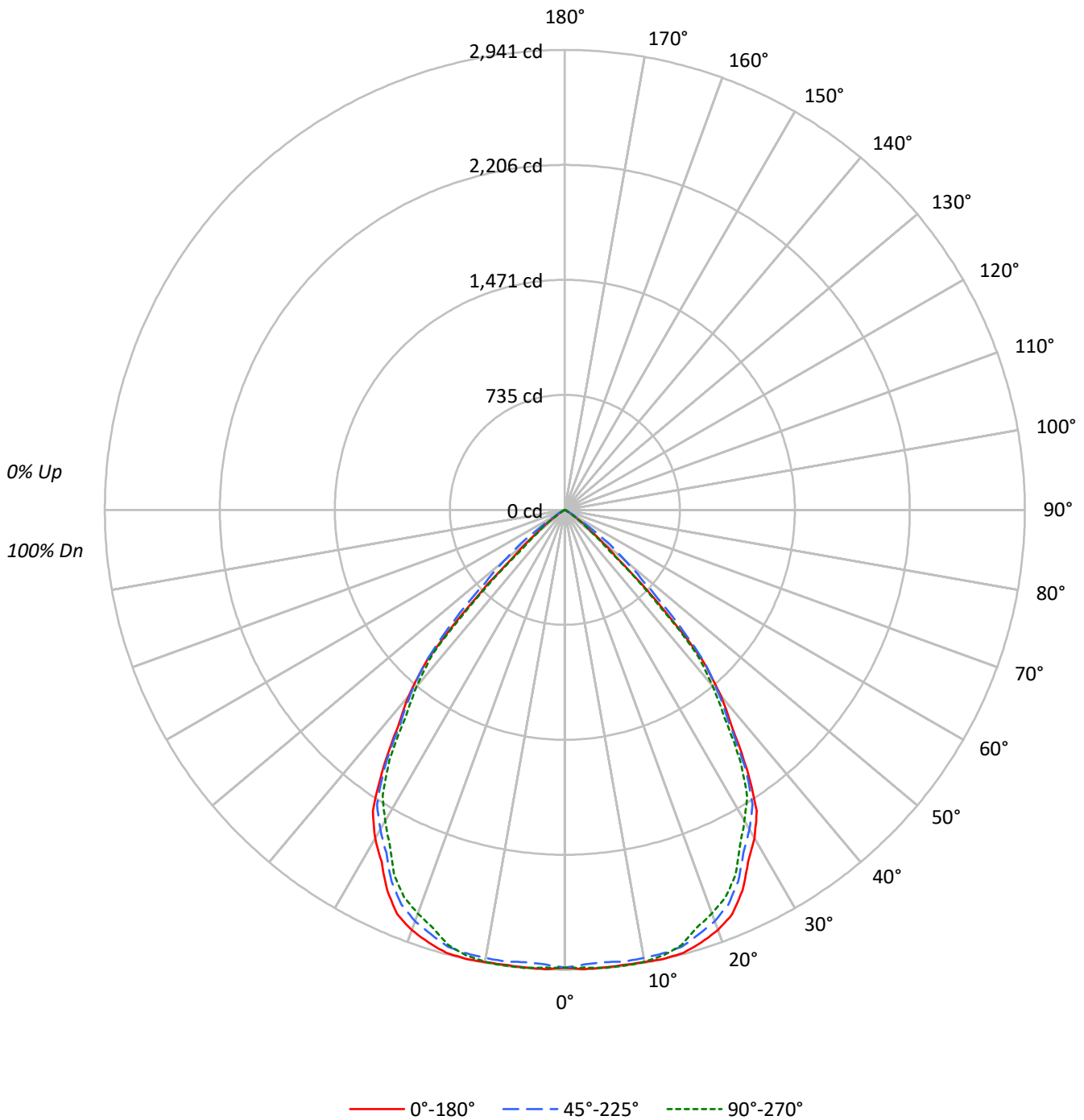
Lumens per Lamp: N/A
Luminaire Lumens: 4370.8 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.17 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 54.6
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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92
2	106	101	96	93	104	99	95	92	96	92	90	93	90	88	90	88	86	84
3	100	93	87	83	98	91	86	82	89	84	81	86	82	79	84	81	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	67	86	78	72	67	76	70	66	74	69	66	72	68	65	63
6	83	73	66	61	81	72	65	61	70	65	60	69	64	60	67	63	60	58
7	78	67	61	56	76	67	60	56	65	59	55	64	59	55	63	58	55	53
8	73	63	56	51	72	62	55	51	61	55	51	60	54	51	59	54	50	49
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	47	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	47270	47270	47270
5°	47592	47063	47663
10°	48142	47714	48106
15°	49011	48356	48137
20°	49144	48098	47199
25°	47853	46689	45952
30°	45209	43991	42815
35°	40073	39600	38485
40°	32711	32252	30968
45°	19285	22763	17943
50°	6506	12685	5795
55°	2207	4535	2328
60°	210	1337	71
65°	0	84	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: 22763 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.7	6.4
10°-20°	818.9	18.7
20°-30°	1205.0	27.6
30°-40°	1231.2	28.2
40°-50°	707.8	16.2
50°-60°	123.8	2.8
60°-70°	4.5	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°	2303.6	52.7
0°-40°	3534.8	80.9
0°-60°	4366.4	99.9
0°-90°	4370.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4370.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2928	2928	2928	2928	2928	
5°	2936	2930	2904	2945	2941	280
15°	2932	2958	2893	2895	2880	826
25°	2686	2710	2621	2592	2579	1228
35°	2033	2044	2009	1976	1952	1254
45°	845	983	997	945	786	660
55°	78	93	161	91	83	89
65°	0	0	2	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°	2927.7	2927.7	2927.7	2927.7	2927.7
2.5°	2939.9	2933.1	2910.3	2936.2	2929.4
5°	2936.4	2930.1	2903.8	2945.1	2940.8
7.5°	2934.7	2929.7	2912.0	2947.9	2939.5
10°	2936.4	2936.4	2910.3	2942.7	2934.2
12.5°	2939.9	2948.4	2905.1	2930.5	2918.6
15°	2932.1	2957.5	2892.9	2894.6	2879.8
17.5°	2900.3	2934.7	2846.3	2825.4	2802.8
20°	2860.2	2896.4	2799.3	2766.2	2747.0
22.5°	2799.3	2833.7	2731.4	2703.5	2682.6
25°	2686.1	2709.6	2620.8	2592.3	2579.4
27.5°	2538.1	2550.0	2472.8	2443.2	2421.8
30°	2424.9	2424.9	2359.6	2326.3	2296.5
32.5°	2283.8	2277.1	2234.2	2195.7	2167.6
35°	2033.1	2043.7	2009.1	1976.0	1952.5
37.5°	1755.8	1766.0	1730.5	1692.6	1676.5
40°	1552.0	1560.5	1530.2	1490.6	1469.3
42.5°	1301.2	1347.2	1319.5	1276.2	1248.1
45°	844.6	983.0	996.9	945.4	785.8
47.5°	440.1	584.9	691.3	528.1	370.0
50°	259.0	352.6	505.0	288.2	230.7
52.5°	166.7	207.7	355.2	184.4	155.9
55°	78.4	93.2	161.1	91.2	82.7
57.5°	29.2	43.5	72.7	44.2	31.8
60°	6.5	19.4	41.4	12.8	2.2
62.5°	1.3	5.7	23.9	2.6	0.4
65°	0.0	0.0	2.2	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	5.43	6.56	5.80	6.88	7.19	5.02	6.15	5.39	6.46	6.78
	3H	5.27	6.25	5.65	6.59	6.95	4.85	5.84	5.24	6.17	6.54
	4H	5.18	6.09	5.58	6.44	6.83	4.76	5.68	5.17	6.03	6.42
	6H	5.08	5.91	5.50	6.29	6.68	4.67	5.50	5.08	5.88	6.27
	8H	5.03	5.81	5.46	6.21	6.61	4.62	5.40	5.05	5.79	6.20
	12H	4.98	5.73	5.41	6.11	6.54	4.56	5.31	5.00	5.70	6.13
4H	2H	5.19	6.10	5.59	6.45	6.84	4.78	5.69	5.18	6.04	6.43
	3H	5.01	5.75	5.43	6.15	6.56	4.60	5.33	5.01	5.74	6.15
	4H	4.90	5.55	5.34	5.98	6.42	4.49	5.14	4.93	5.57	6.01
	6H	4.80	5.36	5.27	5.81	6.28	4.39	4.95	4.86	5.40	5.87
	8H	4.73	5.25	5.21	5.70	6.18	4.32	4.84	4.80	5.29	5.77
	12H	4.67	5.13	5.16	5.61	6.09	4.26	4.72	4.75	5.20	5.68
8H	4H	4.73	5.25	5.21	5.70	6.18	4.32	4.84	4.80	5.29	5.77
	6H	4.61	5.03	5.12	5.53	6.02	4.20	4.62	4.71	5.12	5.61
	8H	4.54	4.92	5.07	5.44	5.93	4.13	4.51	4.66	5.03	5.52
	12H	4.48	4.82	5.00	5.31	5.89	4.07	4.40	4.59	4.90	5.48
12H	4H	4.67	5.13	5.16	5.61	6.09	4.26	4.72	4.75	5.20	5.68
	6H	4.54	4.92	5.07	5.44	5.93	4.13	4.51	4.66	5.03	5.52
	8H	4.48	4.82	5.00	5.31	5.89	4.07	4.40	4.59	4.90	5.48