

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: P845455

Luminaire Tested: SQ2R-BBM-125D-935-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845455
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-935-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - BLACK BAFFLE, WIDE 80-DEGREE OPTIC
1250 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

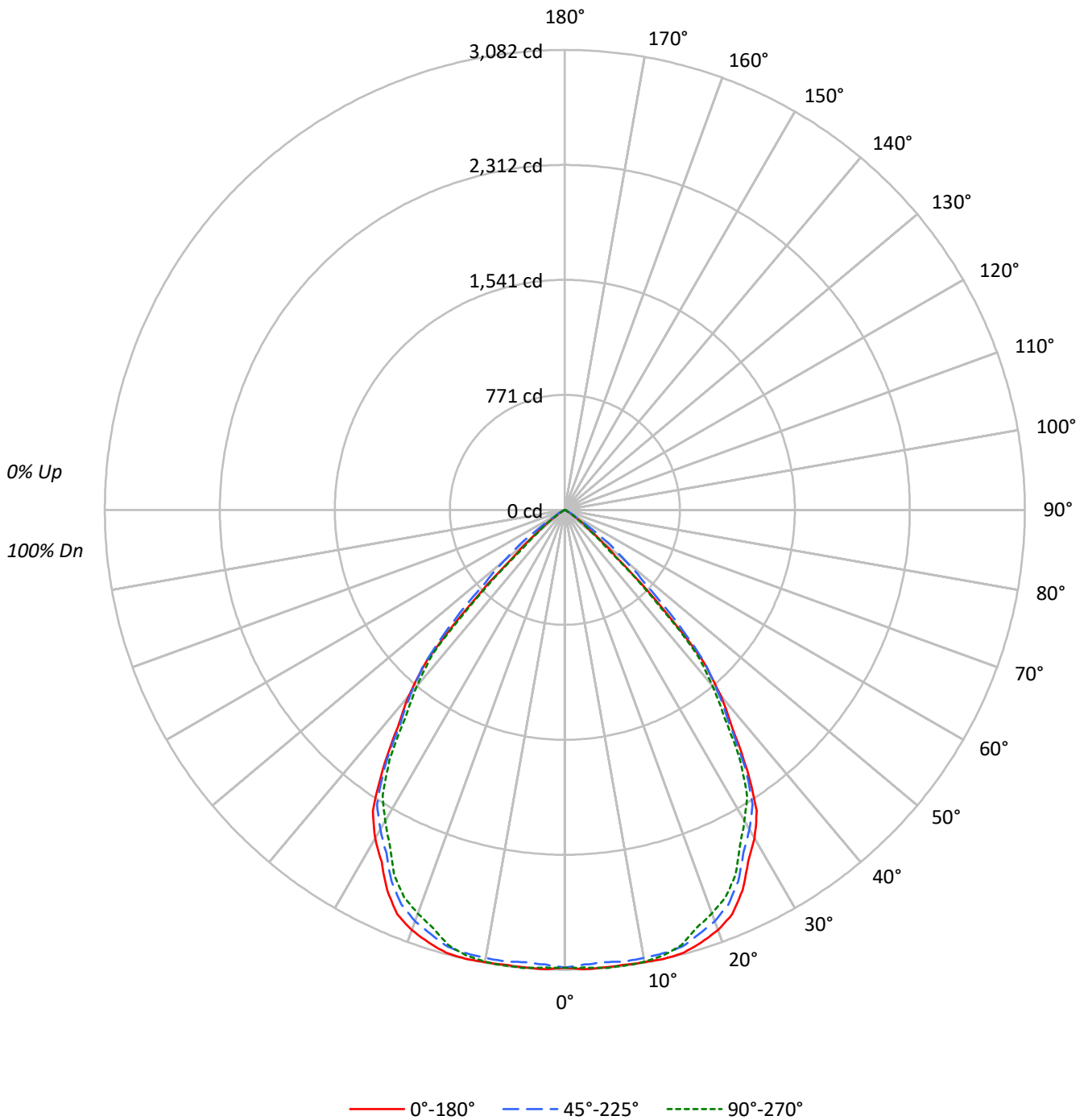
Lumens per Lamp: N/A
Luminaire Lumens: 4580.6 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.17 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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°	49539	49539	49539
5°	49875	49321	49950
10°	50452	50004	50414
15°	51363	50676	50447
20°	51503	50405	49465
25°	50149	48931	48157
30°	47377	46102	44870
35°	41995	41500	40331
40°	34282	33801	32454
45°	20210	23857	18804
50°	6820	13293	6074
55°	2311	4752	2441
60°	220	1398	74
65°	0	88	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: 23857 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.2	6.4
10°-20°	858.2	18.7
20°-30°	1262.8	27.6
30°-40°	1290.2	28.2
40°-50°	741.8	16.2
50°-60°	129.7	2.8
60°-70°	4.7	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°	2414.1	52.7
0°-40°	3704.4	80.9
0°-60°	4575.9	99.9
0°-90°	4580.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4580.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3068	3068	3068	3068	3068	
5°	3077	3071	3043	3086	3082	294
15°	3073	3100	3032	3034	3018	866
25°	2815	2840	2747	2717	2703	1287
35°	2131	2142	2106	2071	2046	1315
45°	885	1030	1045	991	824	692
55°	82	98	169	96	87	93
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°	3068.2	3068.2	3068.2	3068.2	3068.2
2.5°	3081.0	3073.9	3050.0	3077.1	3070.0
5°	3077.3	3070.7	3043.1	3086.5	3081.9
7.5°	3075.5	3070.3	3051.8	3089.4	3080.5
10°	3077.3	3077.3	3050.0	3083.9	3075.0
12.5°	3081.0	3089.9	3044.5	3071.2	3058.6
15°	3072.8	3099.5	3031.7	3033.5	3018.0
17.5°	3039.5	3075.5	2982.9	2961.0	2937.3
20°	2997.5	3035.4	2933.6	2898.9	2878.9
22.5°	2933.6	2969.7	2862.4	2833.2	2811.3
25°	2815.0	2839.6	2746.6	2716.7	2703.2
27.5°	2659.9	2672.4	2591.4	2560.4	2538.1
30°	2541.2	2541.2	2472.8	2437.9	2406.7
32.5°	2393.4	2386.4	2341.4	2301.0	2271.6
35°	2130.6	2141.8	2105.5	2070.9	2046.2
37.5°	1840.0	1850.7	1813.5	1773.9	1757.0
40°	1626.5	1635.4	1603.7	1562.2	1539.8
42.5°	1363.7	1411.8	1382.9	1337.5	1308.0
45°	885.1	1030.2	1044.8	990.7	823.5
47.5°	461.3	613.0	724.5	553.4	387.8
50°	271.5	369.6	529.2	302.0	241.8
52.5°	174.7	217.6	372.3	193.2	163.3
55°	82.1	97.6	168.8	95.6	86.7
57.5°	30.6	45.6	76.2	46.3	33.3
60°	6.8	20.3	43.3	13.5	2.3
62.5°	1.4	5.9	25.1	2.7	0.5
65°	0.0	0.0	2.3	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	5.59	6.72	5.96	7.03	7.35	5.19	6.32	5.55	6.63	6.95
	3H	5.42	6.41	5.80	6.74	7.11	5.02	6.01	5.40	6.34	6.71
	4H	5.33	6.25	5.74	6.60	6.99	4.93	5.85	5.34	6.20	6.59
	6H	5.24	6.07	5.65	6.45	6.84	4.84	5.67	5.25	6.04	6.44
	8H	5.19	5.97	5.62	6.36	6.77	4.78	5.57	5.22	5.96	6.37
	12H	5.13	5.88	5.57	6.27	6.70	4.73	5.48	5.16	5.86	6.30
4H	2H	5.34	6.26	5.75	6.61	7.00	4.94	5.86	5.35	6.21	6.60
	3H	5.17	5.90	5.58	6.31	6.72	4.77	5.50	5.18	5.91	6.31
	4H	5.06	5.71	5.50	6.13	6.58	4.66	5.31	5.10	5.73	6.18
	6H	4.96	5.52	5.43	5.97	6.44	4.56	5.12	5.03	5.56	6.04
	8H	4.89	5.41	5.36	5.86	6.33	4.49	5.01	4.96	5.46	5.93
	12H	4.83	5.28	5.32	5.77	6.25	4.43	4.88	4.92	5.37	5.85
8H	4H	4.89	5.41	5.36	5.86	6.33	4.49	5.01	4.96	5.46	5.93
	6H	4.77	5.19	5.28	5.69	6.17	4.37	4.79	4.88	5.29	5.77
	8H	4.69	5.07	5.22	5.59	6.09	4.29	4.67	4.82	5.19	5.69
	12H	4.64	4.97	5.16	5.47	6.05	4.24	4.57	4.76	5.07	5.65
12H	4H	4.83	5.28	5.32	5.77	6.25	4.43	4.88	4.92	5.37	5.85
	6H	4.69	5.07	5.22	5.59	6.09	4.29	4.67	4.82	5.19	5.69
	8H	4.64	4.97	5.16	5.47	6.05	4.24	4.57	4.76	5.07	5.65