

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: P845456

Luminaire Tested: SQ2R-BBM-125D-940-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845456
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-940-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - BLACK BAFFLE, WIDE 80-DEGREE OPTIC
1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

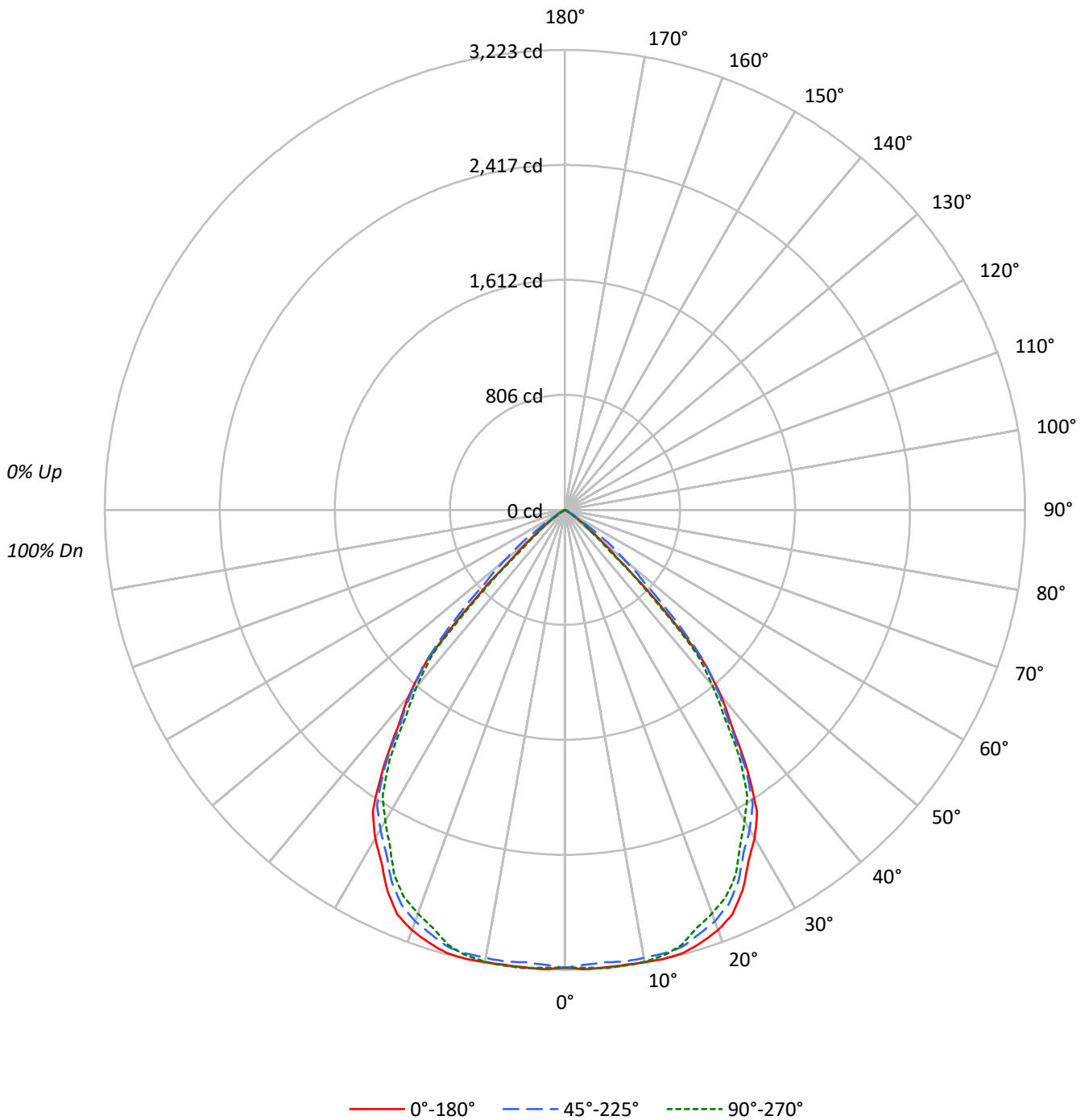
Lumens per Lamp: N/A
Luminaire Lumens: 4790.6 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.17 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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°	51810	51810	51810
5°	52162	51582	52240
10°	52765	52297	52726
15°	53717	53000	52761
20°	53864	52716	51733
25°	52449	51173	50366
30°	49551	48216	46926
35°	43921	43404	42180
40°	35854	35350	33942
45°	21137	24950	19667
50°	7131	13903	6352
55°	2418	4968	2553
60°	233	1463	78
65°	0	92	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: 24950 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	306.6	6.4
10°-20°	897.5	18.7
20°-30°	1320.7	27.6
30°-40°	1349.4	28.2
40°-50°	775.8	16.2
50°-60°	135.7	2.8
60°-70°	4.9	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°	2524.8	52.7
0°-40°	3874.2	80.9
0°-60°	4785.7	99.9
0°-90°	4790.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4790.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3209	3209	3209	3209	3209	
5°	3218	3212	3183	3228	3223	307
15°	3214	3242	3171	3173	3156	905
25°	2944	2970	2872	2841	2827	1346
35°	2228	2240	2202	2166	2140	1375
45°	926	1077	1093	1036	861	724
55°	86	102	176	100	91	98
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°	3208.9	3208.9	3208.9	3208.9	3208.9
2.5°	3222.2	3214.8	3189.8	3218.2	3210.8
5°	3218.4	3211.5	3182.6	3228.0	3223.2
7.5°	3216.5	3211.0	3191.7	3231.1	3221.8
10°	3218.4	3218.4	3189.8	3225.3	3216.0
12.5°	3222.2	3231.5	3184.1	3212.0	3198.9
15°	3213.6	3241.6	3170.7	3172.6	3156.4
17.5°	3178.8	3216.5	3119.6	3096.7	3071.9
20°	3134.9	3174.5	3068.1	3031.9	3010.9
22.5°	3068.1	3105.8	2993.7	2963.1	2940.2
25°	2944.1	2969.8	2872.5	2841.2	2827.2
27.5°	2781.8	2794.9	2710.2	2677.8	2654.4
30°	2657.8	2657.8	2586.2	2549.7	2517.0
32.5°	2503.2	2495.8	2448.8	2406.5	2375.8
35°	2228.3	2240.0	2202.1	2165.8	2140.0
37.5°	1924.4	1935.6	1896.7	1855.2	1837.5
40°	1701.1	1710.4	1677.2	1633.8	1610.4
42.5°	1426.2	1476.6	1446.3	1398.8	1368.0
45°	925.7	1077.4	1092.7	1036.1	861.3
47.5°	482.4	641.1	757.7	578.8	405.6
50°	283.9	386.5	553.5	315.9	252.9
52.5°	182.8	227.6	389.4	202.1	170.8
55°	85.9	102.1	176.5	100.0	90.7
57.5°	32.0	47.7	79.7	48.4	34.8
60°	7.2	21.2	45.3	14.1	2.4
62.5°	1.4	6.2	26.2	2.9	0.5
65°	0.0	0.0	2.4	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	5.75	6.88	6.11	7.19	7.51	5.34	6.48	5.71	6.79	7.10
	3H	5.58	6.57	5.96	6.90	7.27	5.18	6.17	5.56	6.50	6.87
	4H	5.49	6.40	5.90	6.76	7.14	5.09	6.00	5.49	6.35	6.74
	6H	5.39	6.23	5.81	6.60	7.00	4.99	5.83	5.41	6.20	6.60
	8H	5.34	6.13	5.78	6.52	6.93	4.94	5.73	5.37	6.12	6.53
	12H	5.29	6.04	5.72	6.42	6.85	4.89	5.64	5.32	6.02	6.45
4H	2H	5.50	6.41	5.91	6.77	7.15	5.10	6.01	5.50	6.37	6.75
	3H	5.33	6.06	5.74	6.47	6.87	4.92	5.66	5.34	6.07	6.47
	4H	5.22	5.87	5.65	6.29	6.74	4.81	5.47	5.25	5.89	6.34
	6H	5.12	5.67	5.58	6.12	6.59	4.71	5.27	5.18	5.72	6.19
	8H	5.05	5.57	5.52	6.02	6.49	4.64	5.17	5.12	5.62	6.09
	12H	4.99	5.44	5.48	5.93	6.41	4.59	5.04	5.08	5.53	6.00
8H	4H	5.05	5.57	5.52	6.02	6.49	4.64	5.17	5.12	5.62	6.09
	6H	4.93	5.35	5.43	5.85	6.33	4.52	4.94	5.03	5.45	5.93
	8H	4.85	5.23	5.38	5.75	6.25	4.45	4.83	4.98	5.35	5.84
	12H	4.79	5.13	5.31	5.63	6.20	4.39	4.73	4.91	5.22	5.80
12H	4H	4.99	5.44	5.48	5.93	6.41	4.59	5.04	5.08	5.53	6.00
	6H	4.85	5.23	5.38	5.75	6.25	4.45	4.83	4.98	5.35	5.84
	8H	4.79	5.13	5.31	5.63	6.20	4.39	4.73	4.91	5.22	5.80