

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: P853533

Luminaire Tested: SQ2-BBM-125D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853533
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-BBM-125D-930-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

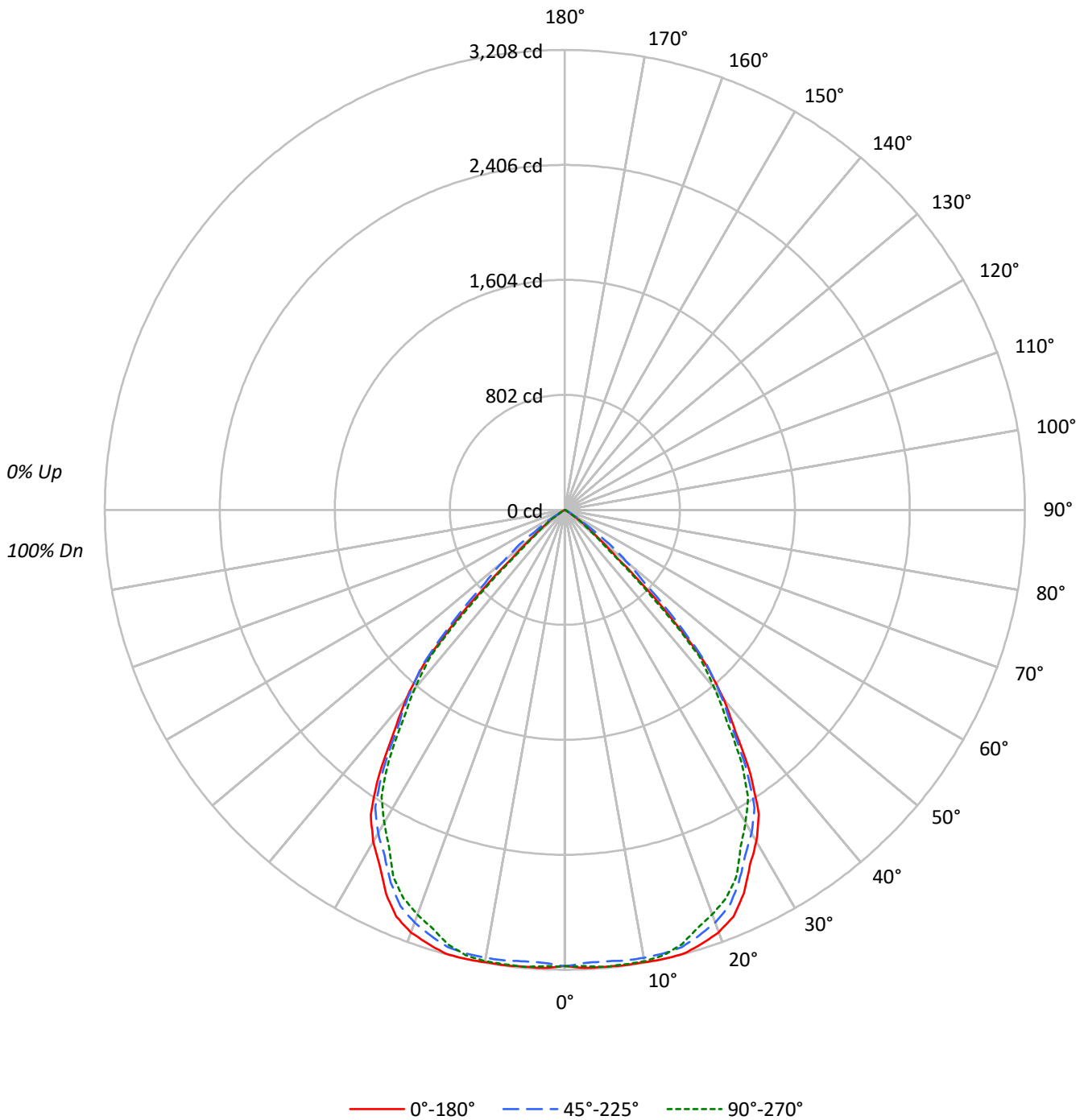
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4806.1 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.18 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 49.8
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

TEST NUMBER: P853533
CATALOG NUMBER: SQ2-BBM-125D-930-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P853533

CATALOG NUMBER: SQ2-BBM-125D-930-UNV-STD-W-4

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	91	96	92	89	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	75	72	78	74	71	69
5	88	79	72	67	86	78	71	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	59	58
7	78	67	60	56	76	67	60	55	65	59	55	64	59	55	63	58	55	53
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49
9	69	58	51	47	68	58	51	47	57	51	47	56	50	46	55	50	46	45
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	46	43	41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	51400	51400	51400
5°	51862	51224	51862
10°	52524	52021	52415
15°	53585	52764	52475
20°	53890	52634	51627
25°	52586	51129	50358
30°	49795	48541	46961
35°	44532	43489	42275
40°	36267	35738	34279
45°	22137	25080	19941
50°	7224	14036	6355
55°	2463	4954	2545
60°	187	1427	61
65°	38	73	0
70°	0	47	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 25122 cd/sqm



TEST NUMBER: P853533

CATALOG NUMBER: SQ2-BBM-125D-930-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	304.7	6.3
10°-20°	894.6	18.6
20°-30°	1322.1	27.5
30°-40°	1358.8	28.3
40°-50°	784.8	16.3
50°-60°	136.0	2.8
60°-70°	5.1	0.1
70°-80°	0.1	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°	2521.4	52.5
0°-40°	3880.1	80.7
0°-60°	4800.9	99.9
0°-90°	4806.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4806.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3184	3184	3184	3184	3184	
5°	3200	3190	3160	3206	3200	306
15°	3206	3229	3157	3162	3139	903
25°	2952	2978	2870	2837	2827	1350
35°	2259	2260	2206	2172	2145	1390
45°	970	1100	1098	1040	873	741
55°	88	102	176	100	90	98
65°	1	1	2	1	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P853533

CATALOG NUMBER: SQ2-BBM-125D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3183.5	3183.5	3183.5	3183.5	3183.5
2.5°	3198.2	3189.1	3163.5	3192.6	3185.9
5°	3199.9	3190.5	3160.5	3206.5	3199.9
7.5°	3203.0	3197.1	3171.4	3207.5	3197.0
10°	3203.7	3204.7	3173.0	3204.5	3197.0
12.5°	3208.4	3217.6	3169.9	3195.2	3182.4
15°	3205.7	3229.2	3156.6	3161.9	3139.3
17.5°	3173.4	3207.2	3114.1	3091.3	3063.1
20°	3136.4	3170.3	3063.3	3032.9	3004.7
22.5°	3071.0	3107.9	2993.3	2959.8	2933.9
25°	2951.8	2978.1	2870.0	2837.1	2826.7
27.5°	2794.8	2804.2	2720.5	2677.1	2652.8
30°	2670.9	2669.0	2603.6	2553.7	2518.9
32.5°	2517.8	2527.2	2461.2	2414.5	2378.9
35°	2259.3	2260.2	2206.4	2172.1	2144.8
37.5°	1957.6	1952.9	1915.7	1869.6	1854.2
40°	1720.7	1727.2	1695.6	1643.3	1626.4
42.5°	1446.0	1489.4	1467.1	1405.5	1384.8
45°	969.5	1100.2	1098.4	1039.8	873.3
47.5°	496.1	659.7	758.1	593.8	398.4
50°	287.6	391.0	558.8	308.4	253.0
52.5°	182.2	231.4	397.2	200.5	168.3
55°	87.5	101.6	176.0	99.8	90.4
57.5°	31.9	47.5	78.1	48.5	34.2
60°	5.8	19.9	44.2	13.2	1.9
62.5°	1.9	5.5	25.8	3.4	1.2
65°	1.0	1.0	1.9	0.9	0.0
67.5°	0.0	0.9	1.0	0.0	0.0
70°	0.0	0.9	1.0	0.0	0.0
72.5°	0.0	0.2	0.2	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



TEST NUMBER: P853533

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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	5.65	6.78	6.02	7.10	7.41	5.26	6.39	5.63	6.71	7.02
	3H	5.49	6.48	5.87	6.81	7.18	5.09	6.08	5.48	6.42	6.78
	4H	5.40	6.31	5.80	6.66	7.05	5.00	5.92	5.41	6.27	6.66
	6H	5.30	6.14	5.72	6.51	6.91	4.91	5.74	5.33	6.12	6.51
	8H	5.25	6.04	5.68	6.43	6.84	4.86	5.64	5.29	6.04	6.44
	12H	5.20	5.95	5.63	6.33	6.76	4.80	5.56	5.24	5.94	6.37
4H	2H	5.40	6.32	5.81	6.67	7.06	5.01	5.93	5.42	6.28	6.67
	3H	5.23	5.97	5.64	6.37	6.78	4.84	5.57	5.25	5.98	6.39
	4H	5.12	5.77	5.56	6.20	6.64	4.73	5.38	5.17	5.81	6.25
	6H	5.02	5.58	5.49	6.03	6.50	4.63	5.19	5.10	5.64	6.11
	8H	4.95	5.47	5.43	5.92	6.40	4.56	5.08	5.04	5.53	6.01
	12H	4.89	5.35	5.38	5.83	6.31	4.50	4.96	4.99	5.44	5.92
8H	4H	4.95	5.47	5.43	5.92	6.40	4.56	5.08	5.04	5.53	6.01
	6H	4.83	5.25	5.34	5.75	6.24	4.44	4.86	4.95	5.36	5.85
	8H	4.76	5.14	5.29	5.66	6.15	4.37	4.75	4.89	5.27	5.76
	12H	4.70	5.04	5.22	5.53	6.11	4.31	4.64	4.83	5.14	5.72
12H	4H	4.89	5.35	5.38	5.83	6.31	4.50	4.96	4.99	5.44	5.92
	6H	4.76	5.14	5.29	5.66	6.15	4.37	4.75	4.90	5.27	5.76
	8H	4.70	5.04	5.22	5.53	6.11	4.31	4.64	4.83	5.14	5.72