

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: P854371

Luminaire Tested: SQ2-WBM-100D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854371
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBM-100D-935-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

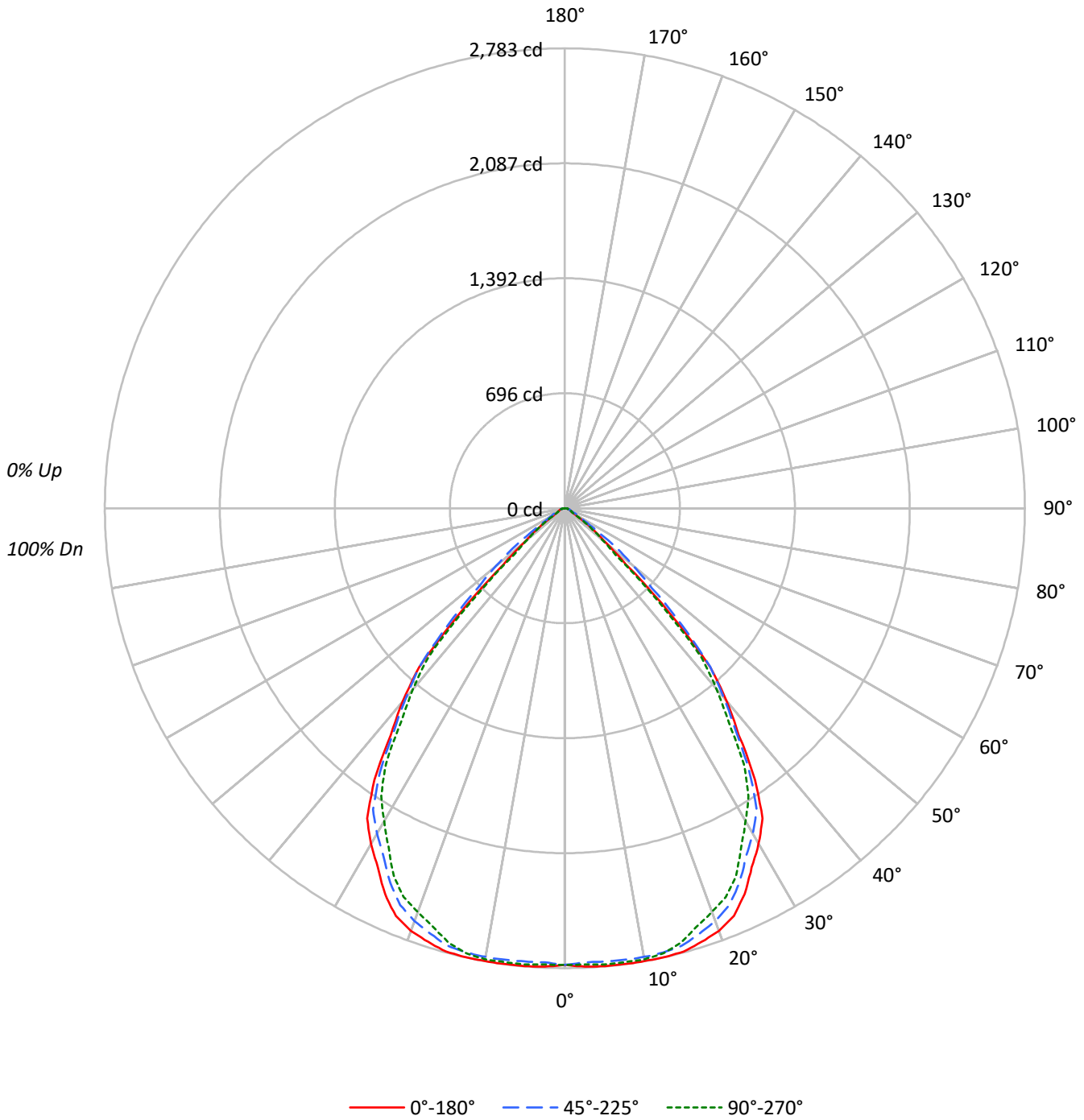
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4360.4 lumens
Efficiency: N/A
Efficacy: 114.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.18 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 38.1
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100	
1	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91			91	
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	84	83			83	
3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	83	79	77	75			75	
4	93	84	78	73	91	83	77	72	81	75	71	78	74	70	77	73	70	68			68	
5	87	77	70	65	85	76	70	65	74	69	64	73	68	64	71	67	63	62			62	
6	82	71	64	59	80	70	64	59	69	63	59	67	62	58	66	61	58	56			56	
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	61	57	53	51			51	
8	72	61	54	49	71	60	54	49	59	53	49	58	53	49	57	52	49	47			47	
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43			43	
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40			40	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	44611	44611	44611
5°	45089	44619	44911
10°	45611	45201	45447
15°	46419	45817	45466
20°	46770	45687	44673
25°	45874	44537	43682
30°	43719	42396	40774
35°	39559	38416	37213
40°	32121	31468	30077
45°	20573	22856	18495
50°	8063	13539	7259
55°	3800	6193	3800
60°	1808	3003	1647
65°	1643	1719	1528
70°	1558	1605	1463
75°	1560	1560	1435
80°	1488	1488	1395
85°	1297	1297	1297

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 23007 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.7	6.1
10°-20°	775.6	17.8
20°-30°	1151.1	26.4
30°-40°	1195.7	27.4
40°-50°	719.5	16.5
50°-60°	172.5	4.0
60°-70°	46.8	1.1
70°-80°	26.3	0.6
80°-90°	8.2	0.2
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°	2191.4	50.3
0°-40°	3387.1	77.7
0°-60°	4279.2	98.1
0°-90°	4360.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4360.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2763	2763	2763	2763	2763	
5°	2782	2775	2753	2782	2771	265
15°	2777	2797	2741	2740	2720	783
25°	2575	2593	2500	2467	2452	1178
35°	2007	1988	1949	1910	1888	1229
45°	901	1008	1001	953	810	688
55°	135	153	220	147	135	139
65°	43	44	45	43	40	43
75°	25	26	25	24	23	26
85°	7	8	7	7	7	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2763.0	2763.0	2763.0	2763.0	2763.0
2.5°	2776.6	2770.3	2750.2	2772.4	2763.0
5°	2782.0	2775.2	2753.0	2781.8	2771.0
7.5°	2782.8	2783.2	2757.0	2782.3	2770.4
10°	2782.0	2787.9	2757.0	2780.8	2772.0
12.5°	2782.8	2792.6	2753.8	2771.1	2757.6
15°	2777.0	2796.6	2741.0	2739.6	2720.0
17.5°	2751.6	2775.9	2700.6	2677.5	2654.4
20°	2722.0	2745.5	2659.0	2625.4	2600.0
22.5°	2670.8	2695.1	2599.8	2564.0	2545.6
25°	2575.0	2592.6	2500.0	2466.7	2452.0
27.5°	2449.0	2454.7	2374.0	2335.2	2310.2
30°	2345.0	2349.9	2274.0	2230.0	2187.0
32.5°	2225.8	2217.4	2159.6	2111.6	2067.0
35°	2007.0	1988.4	1949.0	1909.5	1888.0
37.5°	1729.6	1724.9	1696.2	1648.8	1623.0
40°	1524.0	1539.6	1493.0	1458.3	1427.0
42.5°	1304.0	1342.3	1301.8	1252.8	1226.2
45°	901.0	1007.6	1001.0	952.8	810.0
47.5°	501.0	635.2	715.8	561.5	415.4
50°	321.0	412.9	539.0	338.9	289.0
52.5°	225.0	275.5	398.2	240.2	213.0
55°	135.0	152.6	220.0	146.7	135.0
57.5°	81.6	98.6	125.0	98.4	79.8
60°	56.0	70.7	93.0	65.7	51.0
62.5°	48.8	54.1	72.2	51.5	46.2
65°	43.0	44.0	45.0	42.9	40.0
67.5°	37.0	39.0	38.0	37.2	35.0
70°	33.0	35.0	34.0	33.9	31.0
72.5°	29.8	31.8	30.8	30.0	27.8
75°	25.0	26.0	25.0	24.0	23.0
77.5°	19.2	20.2	20.0	19.2	18.2
80°	16.0	17.0	16.0	16.0	15.0
82.5°	12.8	13.0	12.8	12.0	11.8
85°	7.0	8.0	7.0	7.0	7.0
87.5°	2.4	2.4	2.4	2.4	2.4
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	10.27	11.46	10.64	11.77	12.08	9.99	11.17	10.36	11.48	11.80
	3H	10.81	11.85	11.19	12.18	12.55	10.52	11.56	10.90	11.89	12.26
	4H	11.10	12.06	11.50	12.41	12.80	10.78	11.74	11.19	12.10	12.48
	6H	11.34	12.22	11.76	12.59	12.99	11.01	11.89	11.43	12.26	12.66
	8H	11.42	12.25	11.86	12.65	13.05	11.09	11.92	11.52	12.31	12.72
	12H	11.47	12.26	11.90	12.64	13.07	11.14	11.93	11.57	12.31	12.74
4H	2H	10.33	11.29	10.73	11.64	12.03	10.07	11.03	10.47	11.38	11.77
	3H	11.08	11.86	11.49	12.26	12.67	10.82	11.59	11.23	12.00	12.40
	4H	11.50	12.19	11.93	12.61	13.05	11.20	11.89	11.64	12.31	12.76
	6H	11.88	12.48	12.35	12.93	13.40	11.57	12.16	12.03	12.61	13.08
	8H	12.02	12.57	12.49	13.02	13.49	11.69	12.25	12.17	12.69	13.17
	12H	12.10	12.59	12.59	13.07	13.55	11.78	12.27	12.27	12.75	13.23
8H	4H	11.59	12.14	12.06	12.59	13.07	11.32	11.87	11.79	12.32	12.79
	6H	12.10	12.54	12.60	13.04	13.53	11.80	12.25	12.31	12.75	13.23
	8H	12.30	12.71	12.83	13.22	13.72	11.99	12.40	12.52	12.92	13.41
	12H	12.47	12.83	12.99	13.32	13.90	12.16	12.51	12.67	13.01	13.59
12H	4H	11.57	12.06	12.06	12.55	13.02	11.31	11.79	11.80	12.28	12.76
	6H	12.10	12.51	12.63	13.03	13.52	11.82	12.22	12.34	12.74	13.23
	8H	12.36	12.72	12.88	13.21	13.79	12.06	12.42	12.58	12.92	13.49