

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: P854375

Luminaire Tested: SQ2-WBM-0U-125D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854375
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-8)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBM-0U-125D-940-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

Summary

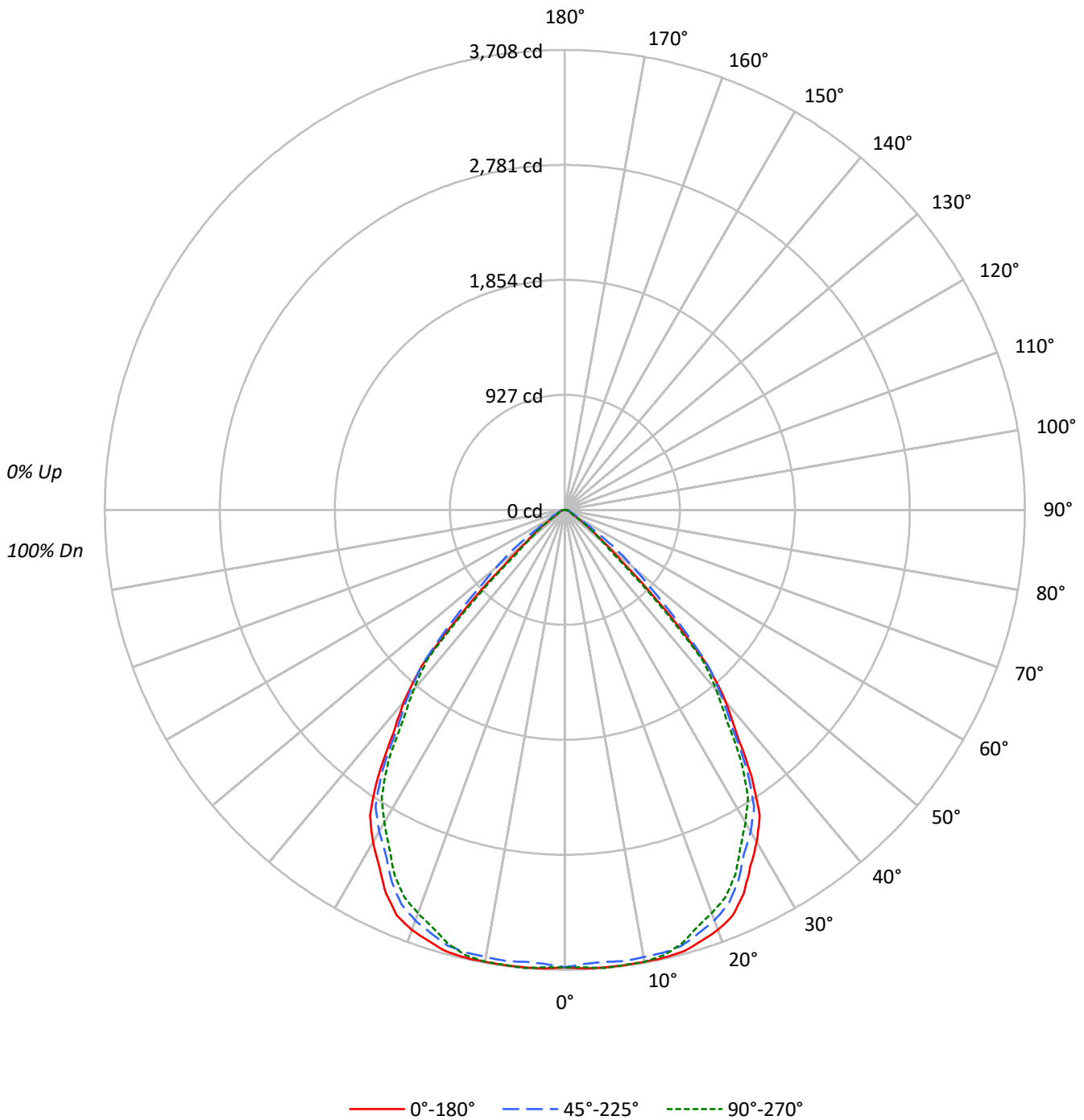
Lumens per Lamp: N/A
Luminaire Lumens: 5761.0 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.18 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 49.7
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	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	85	83
3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	83	79	77	75
4	93	84	78	73	91	83	77	72	81	75	71	79	74	70	77	73	70	68
5	87	77	70	65	85	76	70	65	74	69	65	73	68	64	71	67	63	62
6	82	71	64	59	80	70	64	59	69	63	59	67	62	58	66	61	58	56
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	61	57	53	51
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	59552	59552	59552
5°	60020	59300	60106
10°	60663	60020	60679
15°	61636	60822	60575
20°	61940	60539	59450
25°	60772	58850	57851
30°	57663	55828	54251
35°	51706	50476	48911
40°	42449	41513	39996
45°	26544	30143	24080
50°	10494	17829	9379
55°	5092	8099	5033
60°	2390	3962	2186
65°	2143	2304	2059
70°	2096	2148	1950
75°	2046	2046	1847
80°	1971	1971	1767
85°	1760	1760	1760

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 30143 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	352.4	6.1
10°-20°	1030.1	17.9
20°-30°	1522.9	26.4
30°-40°	1573.6	27.3
40°-50°	946.9	16.4
50°-60°	227.6	4.0
60°-70°	62.2	1.1
70°-80°	34.6	0.6
80°-90°	10.9	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°	2905.4	50.4
0°-40°	4479.0	77.7
0°-60°	5653.4	98.1
0°-90°	5761.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5761.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3688	3688	3688	3688	3688	
5°	3703	3692	3659	3711	3708	353
15°	3687	3715	3639	3639	3624	1039
25°	3411	3437	3303	3257	3247	1559
35°	2623	2617	2561	2512	2482	1614
45°	1162	1320	1320	1248	1055	901
55°	181	204	288	194	179	184
65°	56	59	60	56	54	57
75°	33	35	33	32	30	34
85°	10	11	10	10	10	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3688.4	3688.4	3688.4	3688.4	3688.4
2.5°	3702.0	3692.9	3663.9	3697.6	3691.8
5°	3703.2	3691.9	3658.8	3710.6	3708.5
7.5°	3702.6	3696.6	3668.5	3708.3	3700.3
10°	3700.1	3703.2	3660.9	3704.2	3701.1
12.5°	3698.4	3712.2	3656.7	3687.2	3679.1
15°	3687.4	3715.3	3638.7	3639.4	3623.9
17.5°	3647.2	3681.1	3581.8	3552.4	3532.7
20°	3604.9	3638.0	3523.4	3479.6	3460.0
22.5°	3538.9	3569.5	3442.2	3397.6	3381.3
25°	3411.3	3437.2	3303.4	3256.7	3247.3
27.5°	3239.3	3250.3	3127.4	3081.5	3065.6
30°	3092.9	3093.9	2994.5	2939.9	2909.9
32.5°	2922.8	2915.6	2838.8	2784.0	2746.6
35°	2623.3	2617.1	2560.9	2511.5	2481.5
37.5°	2271.2	2270.2	2216.7	2174.1	2143.9
40°	2014.0	2021.2	1969.6	1916.3	1897.6
42.5°	1706.0	1759.5	1715.7	1657.5	1645.5
45°	1162.5	1319.7	1320.1	1248.0	1054.6
47.5°	664.9	834.5	950.1	735.5	546.0
50°	417.8	546.1	709.8	447.9	373.4
52.5°	296.8	359.7	525.3	315.0	278.6
55°	180.9	203.6	287.7	194.3	178.8
57.5°	109.6	130.9	166.7	130.3	110.0
60°	74.0	93.7	122.7	86.3	67.7
62.5°	65.6	72.8	96.5	68.0	60.9
65°	56.1	59.2	60.3	56.0	53.9
67.5°	49.5	51.6	50.6	49.4	46.3
70°	44.4	46.5	45.5	44.4	41.3
72.5°	39.3	41.4	40.4	39.3	37.0
75°	32.8	34.9	32.8	31.7	29.6
77.5°	25.4	27.2	26.2	25.3	23.3
80°	21.2	22.2	21.2	21.1	19.0
82.5°	16.9	17.1	16.1	16.0	14.8
85°	9.5	10.6	9.5	9.5	9.5
87.5°	3.4	3.4	3.4	3.4	2.5
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	11.29	12.47	11.65	12.78	13.09	10.96	12.14	11.32	12.45	12.77
	3H	11.83	12.86	12.21	13.19	13.56	11.49	12.52	11.87	12.86	13.22
	4H	12.11	13.07	12.52	13.42	13.81	11.74	12.70	12.15	13.05	13.44
	6H	12.35	13.23	12.77	13.60	14.00	11.96	12.83	12.37	13.21	13.60
	8H	12.43	13.26	12.87	13.65	14.06	12.03	12.86	12.46	13.25	13.66
	12H	12.48	13.27	12.91	13.65	14.08	12.08	12.87	12.51	13.25	13.69
4H	2H	11.34	12.30	11.75	12.66	13.04	11.04	12.00	11.45	12.35	12.74
	3H	12.10	12.87	12.51	13.28	13.69	11.79	12.57	12.20	12.97	13.38
	4H	12.51	13.20	12.95	13.62	14.07	12.16	12.85	12.60	13.28	13.72
	6H	12.89	13.49	13.36	13.93	14.41	12.52	13.11	12.98	13.56	14.03
	8H	13.02	13.58	13.50	14.03	14.50	12.64	13.19	13.11	13.64	14.11
	12H	13.11	13.60	13.60	14.08	14.56	12.73	13.21	13.22	13.70	14.17
8H	4H	12.60	13.16	13.08	13.60	14.08	12.28	12.83	12.75	13.28	13.76
	6H	13.10	13.55	13.60	14.05	14.53	12.75	13.20	13.25	13.70	14.18
	8H	13.30	13.71	13.83	14.22	14.72	12.94	13.35	13.47	13.86	14.36
	12H	13.47	13.83	13.99	14.33	14.90	13.11	13.47	13.63	13.96	14.54
12H	4H	12.59	13.07	13.08	13.56	14.03	12.27	12.76	12.76	13.24	13.72
	6H	13.11	13.51	13.63	14.03	14.52	12.77	13.17	13.29	13.69	14.18
	8H	13.36	13.72	13.88	14.21	14.79	13.01	13.37	13.53	13.87	14.44