

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: P853534

Luminaire Tested: SQ2-BBM-125D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853534
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-935-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

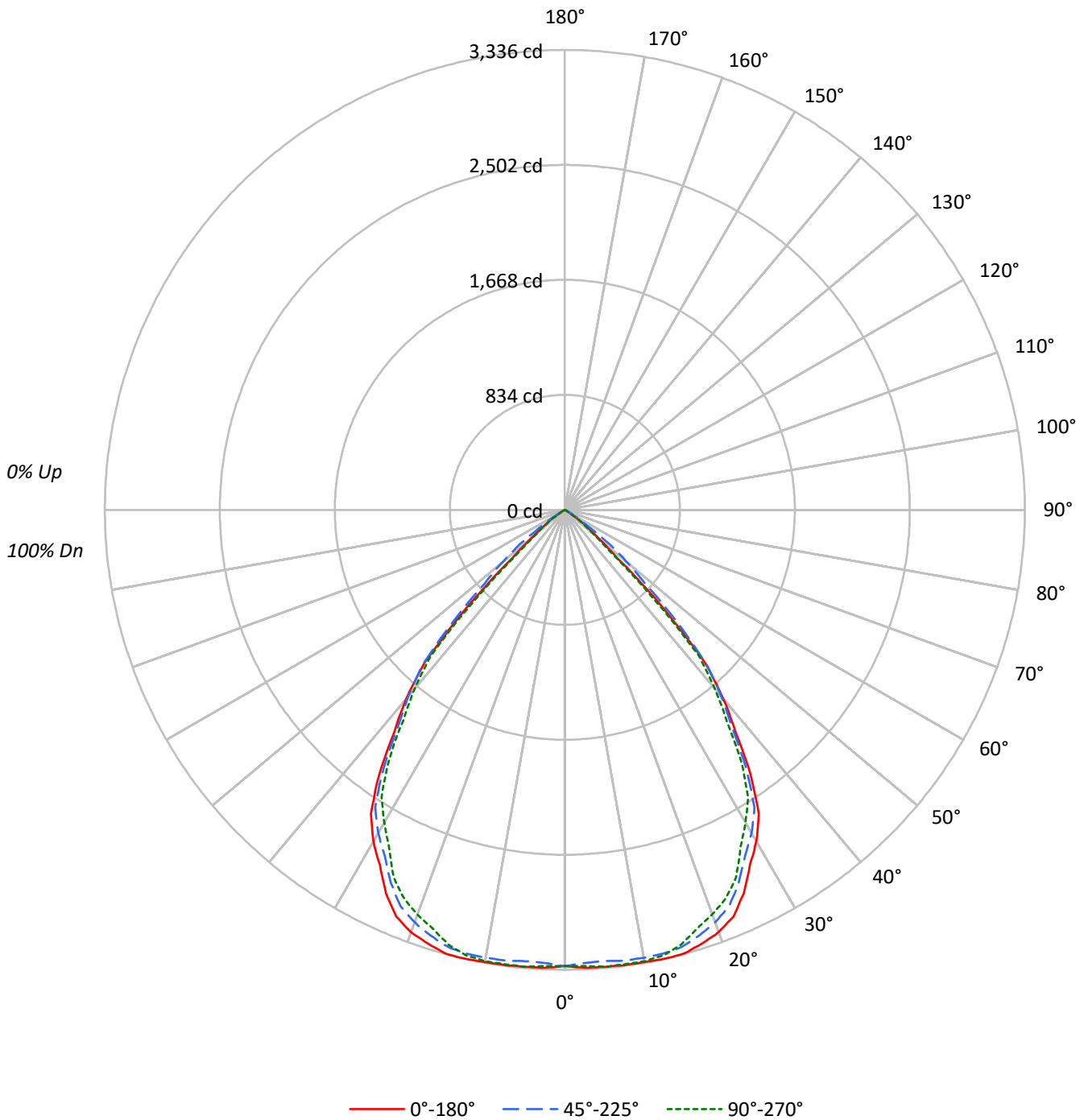
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4997.0 lumens
Efficiency: N/A
Efficacy: 100.3 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

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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	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°	53443	53443	53443
5°	53922	53258	53922
10°	54611	54087	54497
15°	55712	54860	54559
20°	56031	54725	53677
25°	54674	53160	52358
30°	51773	50468	48828
35°	46300	45216	43954
40°	37707	37159	35641
45°	23016	26076	20733
50°	7510	14594	6606
55°	2562	5151	2646
60°	194	1485	65
65°	38	76	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: 26119 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	316.8	6.3
10°-20°	930.1	18.6
20°-30°	1374.6	27.5
30°-40°	1412.7	28.3
40°-50°	816.0	16.3
50°-60°	141.4	2.8
60°-70°	5.3	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°	2621.5	52.5
0°-40°	4034.2	80.7
0°-60°	4991.6	99.9
0°-90°	4997.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4997.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3310	3310	3310	3310	3310	
5°	3327	3317	3286	3334	3327	318
15°	3333	3357	3282	3288	3264	939
25°	3069	3096	2984	2950	2939	1403
35°	2349	2350	2294	2258	2230	1445
45°	1008	1144	1142	1081	908	770
55°	91	106	183	104	94	102
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	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3310.0	3310.0	3310.0	3310.0	3310.0
2.5°	3325.2	3315.8	3289.2	3319.4	3312.4
5°	3327.0	3317.2	3286.0	3333.8	3327.0
7.5°	3330.2	3324.1	3297.4	3335.0	3324.0
10°	3331.0	3332.0	3299.0	3331.8	3324.0
12.5°	3335.8	3345.4	3295.8	3322.1	3308.8
15°	3333.0	3357.4	3282.0	3287.5	3264.0
17.5°	3299.4	3334.6	3237.8	3214.1	3184.8
20°	3261.0	3296.2	3185.0	3153.3	3124.0
22.5°	3193.0	3231.3	3112.2	3077.4	3050.4
25°	3069.0	3096.4	2984.0	2949.8	2939.0
27.5°	2905.8	2915.6	2828.6	2783.4	2758.2
30°	2777.0	2775.0	2707.0	2655.2	2619.0
32.5°	2617.8	2627.6	2559.0	2510.4	2473.4
35°	2349.0	2350.0	2294.0	2258.4	2230.0
37.5°	2035.4	2030.5	1991.8	1943.8	1927.8
40°	1789.0	1795.8	1763.0	1708.6	1691.0
42.5°	1503.4	1548.6	1525.4	1461.3	1439.8
45°	1008.0	1143.9	1142.0	1081.1	908.0
47.5°	515.8	685.9	788.2	617.4	414.2
50°	299.0	406.6	581.0	320.7	263.0
52.5°	189.4	240.6	413.0	208.4	175.0
55°	91.0	105.7	183.0	103.8	94.0
57.5°	33.2	49.4	81.2	50.5	35.6
60°	6.0	20.7	46.0	13.7	2.0
62.5°	2.0	5.7	26.8	3.5	1.2
65°	1.0	1.0	2.0	1.0	0.0
67.5°	0.0	1.0	1.0	0.0	0.0
70°	0.0	1.0	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



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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	5.79	6.92	6.15	7.23	7.55	5.40	6.53	5.76	6.84	7.16
	3H	5.62	6.61	6.01	6.95	7.31	5.23	6.22	5.61	6.55	6.92
	4H	5.53	6.45	5.94	6.80	7.19	5.14	6.06	5.55	6.41	6.80
	6H	5.44	6.27	5.86	6.65	7.04	5.04	5.88	5.46	6.25	6.65
	8H	5.39	6.17	5.82	6.57	6.97	4.99	5.78	5.43	6.17	6.58
	12H	5.33	6.09	5.77	6.47	6.90	4.94	5.69	5.37	6.08	6.51
4H	2H	5.54	6.46	5.95	6.81	7.20	5.15	6.07	5.56	6.42	6.81
	3H	5.37	6.10	5.78	6.51	6.92	4.98	5.71	5.39	6.12	6.52
	4H	5.26	5.91	5.70	6.33	6.78	4.87	5.52	5.30	5.94	6.39
	6H	5.16	5.72	5.63	6.17	6.64	4.77	5.32	5.23	5.77	6.25
	8H	5.09	5.61	5.56	6.06	6.54	4.70	5.22	5.17	5.67	6.14
	12H	5.03	5.49	5.52	5.97	6.45	4.64	5.09	5.13	5.58	6.06
8H	4H	5.09	5.61	5.56	6.06	6.54	4.70	5.22	5.17	5.67	6.14
	6H	4.97	5.39	5.48	5.89	6.38	4.58	5.00	5.08	5.50	5.98
	8H	4.89	5.27	5.42	5.79	6.29	4.50	4.88	5.03	5.40	5.90
	12H	4.84	5.17	5.36	5.67	6.25	4.45	4.78	4.96	5.28	5.86
12H	4H	5.03	5.49	5.52	5.97	6.45	4.64	5.09	5.13	5.58	6.06
	6H	4.90	5.27	5.42	5.79	6.29	4.50	4.88	5.03	5.40	5.90
	8H	4.84	5.17	5.36	5.67	6.25	4.45	4.78	4.96	5.28	5.86