

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: P845672

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

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845672
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P559733)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-WBM-125D-940-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - WHITE BAFFLE, WIDE 80-DEGREE OPTIC
1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

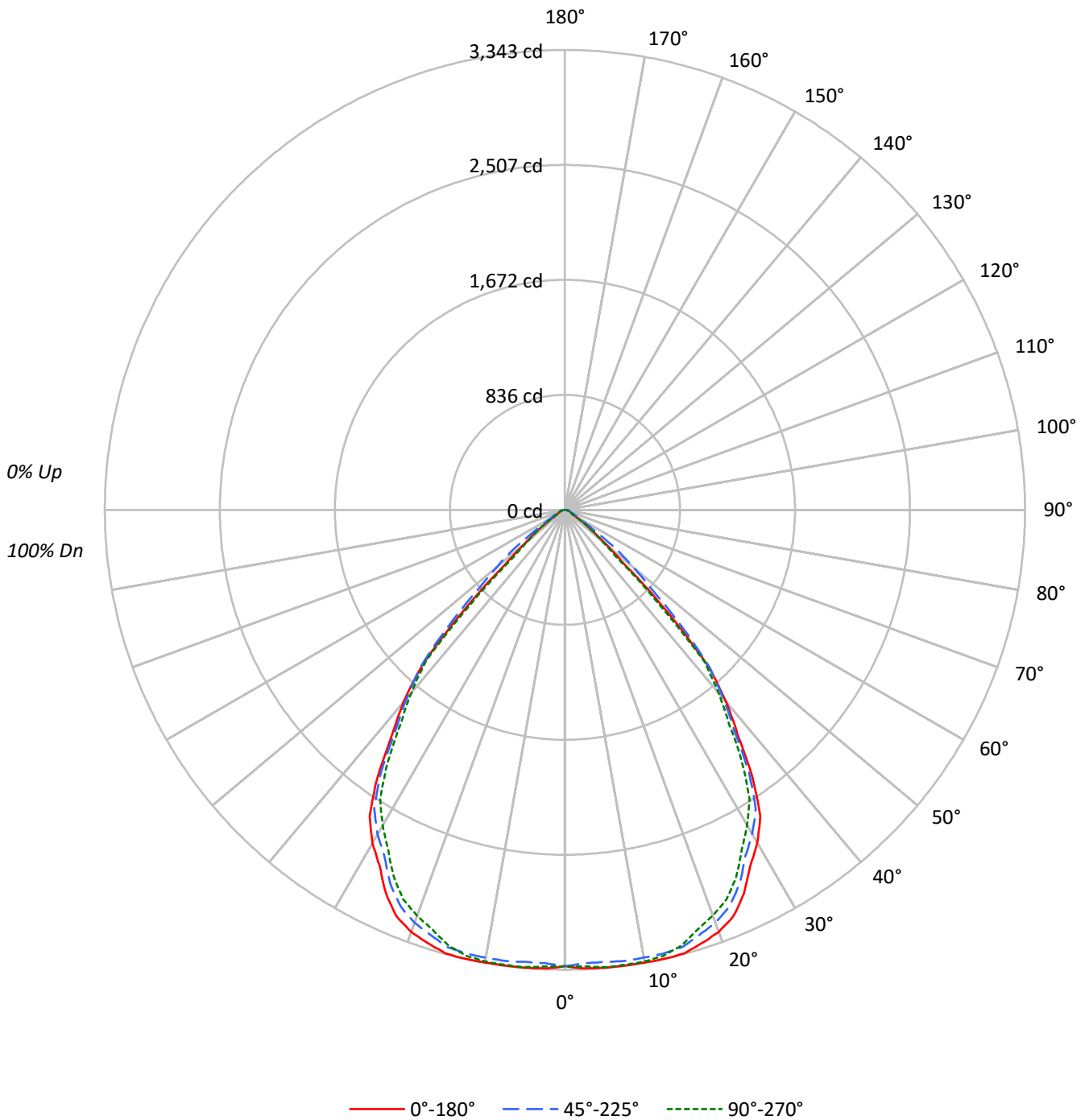
Lumens per Lamp: N/A
Luminaire Lumens: 5221.4 lumens
Efficiency: N/A
Efficacy: 95.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.19 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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	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	78	74	70	77	73	70	68				
5	87	77	70	65	85	76	70	65	74	69	64	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°	53562	53562	53562
5°	54154	53459	54076
10°	54780	54193	54662
15°	55811	55015	54776
20°	56101	54873	53931
25°	54815	53457	52438
30°	52126	50750	49372
35°	46846	45955	44311
40°	38499	37696	36592
45°	24361	27352	21968
50°	9452	16091	8673
55°	4557	7308	4625
60°	2154	3613	1999
65°	1910	2094	1819
70°	1912	1912	1799
75°	1784	1934	1634
80°	1776	1776	1553
85°	1760	1760	1315

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 27352 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	317.7	6.1
10°-20°	932.0	17.8
20°-30°	1380.1	26.4
30°-40°	1429.7	27.4
40°-50°	859.3	16.5
50°-60°	205.4	3.9
60°-70°	56.0	1.1
70°-80°	31.2	0.6
80°-90°	10.0	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°	2629.8	50.4
0°-40°	4059.5	77.7
0°-60°	5124.2	98.1
0°-90°	5221.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5221.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3317	3317	3317	3317	3317	
5°	3341	3330	3298	3341	3336	319
15°	3339	3360	3291	3293	3277	941
25°	3077	3105	3001	2962	2944	1407
35°	2377	2372	2332	2288	2248	1462
45°	1067	1197	1198	1135	962	816
55°	162	185	260	174	164	166
65°	50	52	55	50	48	51
75°	29	31	31	29	26	31
85°	10	10	10	10	7	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3317.4	3317.4	3317.4	3317.4	3317.4
2.5°	3336.5	3325.3	3298.4	3328.6	3321.3
5°	3341.3	3329.6	3298.4	3341.3	3336.5
7.5°	3341.3	3333.9	3307.4	3342.9	3336.0
10°	3341.3	3341.3	3305.5	3341.0	3334.1
12.5°	3343.2	3352.5	3303.6	3329.6	3318.9
15°	3338.9	3359.8	3291.3	3293.2	3277.0
17.5°	3303.2	3335.8	3241.2	3222.2	3199.8
20°	3265.1	3297.7	3193.6	3157.4	3138.8
22.5°	3198.4	3232.9	3121.2	3086.9	3066.4
25°	3076.9	3104.8	3000.7	2962.1	2943.5
27.5°	2915.9	2928.5	2838.3	2802.1	2781.6
30°	2795.9	2793.5	2722.1	2676.1	2648.2
32.5°	2641.6	2644.9	2579.2	2534.9	2497.7
35°	2376.7	2372.0	2331.5	2287.7	2248.1
37.5°	2061.0	2064.3	2021.0	1974.5	1959.0
40°	1826.6	1833.5	1788.5	1738.5	1736.1
42.5°	1540.8	1592.5	1559.9	1507.7	1498.0
45°	1066.9	1197.4	1197.9	1134.6	962.1
47.5°	593.5	756.4	854.0	673.5	503.5
50°	376.3	483.4	640.6	403.4	345.3
52.5°	267.7	320.8	474.9	287.9	252.0
55°	161.9	185.3	259.6	173.6	164.3
57.5°	99.1	119.6	151.9	117.6	98.1
60°	66.7	85.3	111.9	76.0	61.9
62.5°	59.1	64.5	87.2	61.0	56.2
65°	50.0	52.4	54.8	50.0	47.6
67.5°	44.3	46.7	46.2	44.3	41.9
70°	40.5	42.9	40.5	40.5	38.1
72.5°	36.7	37.2	36.7	34.8	34.3
75°	28.6	31.0	31.0	28.6	26.2
77.5°	22.9	24.8	22.9	22.9	20.5
80°	19.1	19.1	19.1	19.1	16.7
82.5°	15.2	15.2	15.2	15.2	12.9
85°	9.5	9.5	9.5	9.5	7.1
87.5°	3.8	3.8	3.8	1.9	1.9
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	10.95	12.13	11.31	12.44	12.76	10.55	11.73	10.91	12.04	12.35
	3H	11.49	12.53	11.87	12.86	13.22	11.09	12.13	11.47	12.46	12.82
	4H	11.76	12.72	12.16	13.07	13.46	11.34	12.30	11.75	12.66	13.04
	6H	11.98	12.86	12.40	13.24	13.63	11.55	12.43	11.97	12.80	13.20
	8H	12.07	12.90	12.50	13.29	13.70	11.62	12.44	12.05	12.84	13.24
	12H	12.13	12.92	12.56	13.30	13.73	11.65	12.44	12.08	12.82	13.25
4H	2H	11.01	11.97	11.41	12.32	12.71	10.64	11.60	11.04	11.95	12.34
	3H	11.77	12.54	12.18	12.95	13.35	11.40	12.18	11.82	12.59	12.99
	4H	12.16	12.85	12.60	13.27	13.72	11.78	12.47	12.22	12.89	13.34
	6H	12.52	13.11	12.99	13.56	14.03	12.12	12.71	12.59	13.16	13.63
	8H	12.65	13.20	13.12	13.65	14.12	12.23	12.79	12.71	13.23	13.71
	12H	12.75	13.24	13.24	13.72	14.20	12.31	12.79	12.79	13.28	13.75
8H	4H	12.26	12.81	12.73	13.26	13.73	11.91	12.46	12.38	12.91	13.38
	6H	12.72	13.17	13.23	13.67	14.16	12.37	12.82	12.87	13.32	13.80
	8H	12.92	13.33	13.45	13.85	14.34	12.56	12.96	13.08	13.48	13.97
	12H	13.11	13.47	13.63	13.96	14.54	12.71	13.07	13.23	13.56	14.14
12H	4H	12.24	12.73	12.73	13.21	13.69	11.90	12.38	12.39	12.87	13.34
	6H	12.73	13.14	13.26	13.65	14.15	12.39	12.79	12.91	13.31	13.80
	8H	12.99	13.34	13.50	13.84	14.42	12.63	12.99	13.15	13.49	14.06