

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: P845671

Luminaire Tested: SQ2R-WBM-125D-935-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845671
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-935-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - WHITE BAFFLE, WIDE 80-DEGREE OPTIC
1250 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

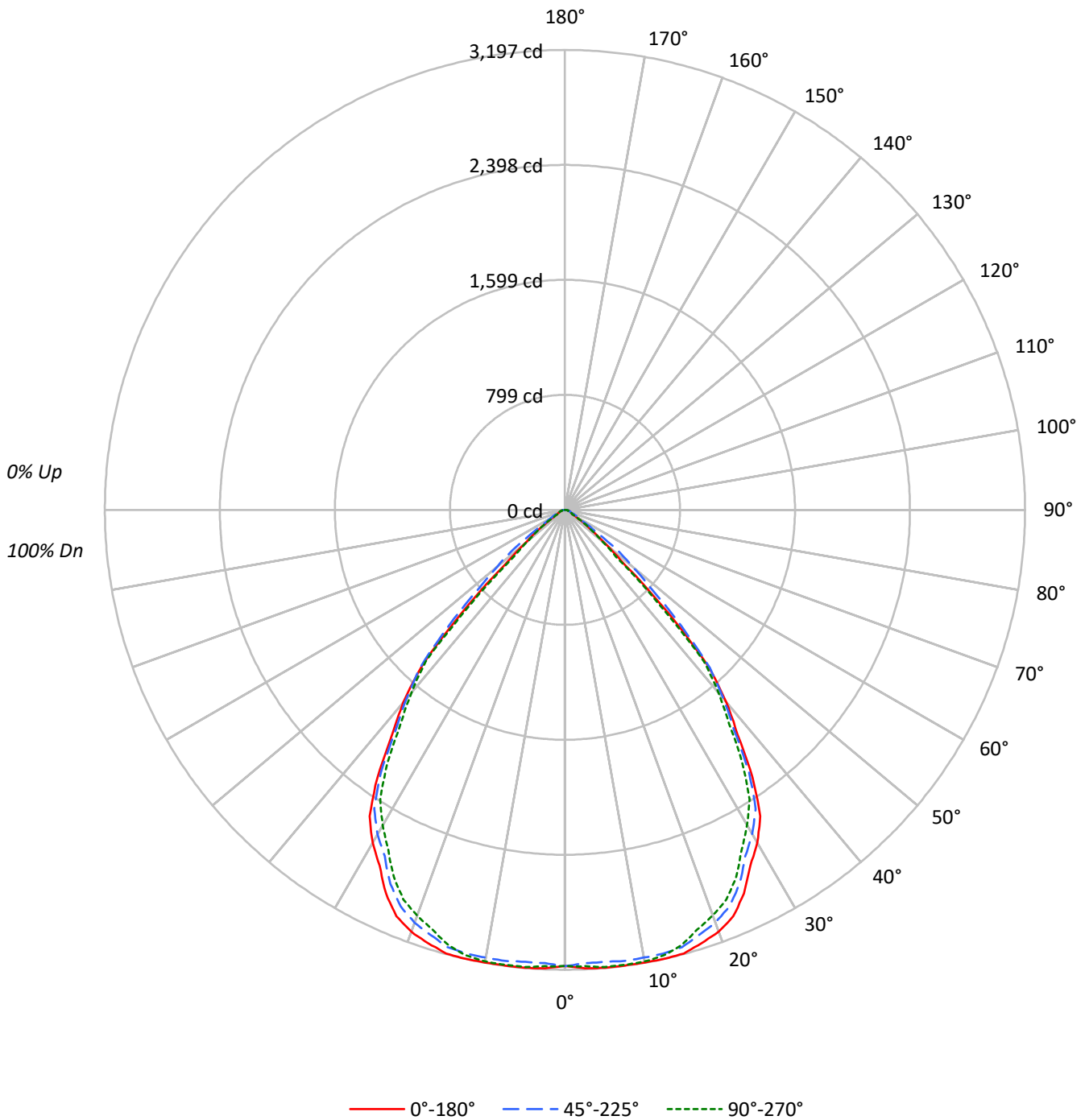
Lumens per Lamp: N/A
Luminaire Lumens: 4992.5 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.19 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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	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°	51215	51215	51215
5°	51780	51115	51705
10°	52378	51818	52267
15°	53364	52603	52374
20°	53641	52467	51567
25°	52412	51115	50140
30°	49840	48524	47207
35°	44794	43940	42370
40°	36811	36044	34988
45°	23293	26154	21007
50°	9038	15385	8294
55°	4358	6987	4422
60°	2060	3455	1912
65°	1826	2002	1738
70°	1827	1827	1718
75°	1703	1847	1560
80°	1692	1692	1478
85°	1686	1686	1260

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 26154 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	303.8	6.1
10°-20°	891.1	17.8
20°-30°	1319.6	26.4
30°-40°	1367.0	27.4
40°-50°	821.6	16.5
50°-60°	196.4	3.9
60°-70°	53.5	1.1
70°-80°	29.8	0.6
80°-90°	9.5	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°	2514.5	50.4
0°-40°	3881.5	77.7
0°-60°	4899.6	98.1
0°-90°	4992.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4992.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3172	3172	3172	3172	3172	
5°	3195	3184	3154	3195	3190	305
15°	3192	3212	3147	3149	3133	899
25°	2942	2969	2869	2832	2814	1346
35°	2273	2268	2229	2187	2150	1398
45°	1020	1145	1145	1085	920	780
55°	155	177	248	166	157	158
65°	48	50	52	48	46	49
75°	27	30	30	27	25	30
85°	9	9	9	9	7	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3172.0	3172.0	3172.0	3172.0	3172.0
2.5°	3190.2	3179.5	3153.8	3182.7	3175.7
5°	3194.8	3183.6	3153.8	3194.8	3190.2
7.5°	3194.8	3187.7	3162.4	3196.4	3189.8
10°	3194.8	3194.8	3160.6	3194.6	3188.0
12.5°	3196.6	3205.5	3158.8	3183.6	3173.4
15°	3192.5	3212.5	3147.0	3148.8	3133.3
17.5°	3158.3	3189.5	3099.1	3080.9	3059.5
20°	3121.9	3153.1	3053.6	3019.0	3001.2
22.5°	3058.2	3091.2	2984.4	2951.6	2932.0
25°	2942.0	2968.7	2869.2	2832.3	2814.5
27.5°	2788.1	2800.2	2713.9	2679.2	2659.7
30°	2673.3	2671.0	2602.7	2558.8	2532.1
32.5°	2525.8	2529.0	2466.1	2423.8	2388.2
35°	2272.6	2268.0	2229.3	2187.4	2149.6
37.5°	1970.6	1973.8	1932.4	1888.0	1873.1
40°	1746.5	1753.1	1710.1	1662.3	1660.0
42.5°	1473.3	1522.7	1491.5	1441.6	1432.3
45°	1020.1	1144.9	1145.4	1084.8	920.0
47.5°	567.5	723.2	816.6	644.0	481.4
50°	359.8	462.3	612.5	385.7	330.2
52.5°	255.9	306.7	454.1	275.3	240.9
55°	154.8	177.2	248.2	166.0	157.1
57.5°	94.7	114.3	145.3	112.5	93.8
60°	63.8	81.5	107.0	72.6	59.2
62.5°	56.5	61.7	83.3	58.3	53.7
65°	47.8	50.1	52.4	47.8	45.5
67.5°	42.4	44.6	44.2	42.4	40.1
70°	38.7	41.0	38.7	38.7	36.4
72.5°	35.1	35.5	35.1	33.2	32.8
75°	27.3	29.6	29.6	27.3	25.0
77.5°	21.9	23.7	21.9	21.9	19.6
80°	18.2	18.2	18.2	18.2	15.9
82.5°	14.6	14.6	14.6	14.6	12.3
85°	9.1	9.1	9.1	9.1	6.8
87.5°	3.6	3.6	3.6	1.8	1.8
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	10.79	11.97	11.16	12.28	12.60	10.39	11.57	10.75	11.88	12.20
	3H	11.33	12.37	11.71	12.70	13.07	10.93	11.97	11.31	12.30	12.67
	4H	11.60	12.56	12.00	12.91	13.30	11.18	12.14	11.59	12.50	12.88
	6H	11.83	12.70	12.24	13.08	13.47	11.39	12.27	11.81	12.64	13.04
	8H	11.91	12.74	12.34	13.13	13.54	11.46	12.28	11.89	12.68	13.08
	12H	11.97	12.76	12.40	13.14	13.57	11.49	12.28	11.92	12.66	13.09
4H	2H	10.85	11.81	11.26	12.16	12.55	10.48	11.44	10.89	11.80	12.18
	3H	11.61	12.38	12.02	12.79	13.20	11.25	12.02	11.66	12.43	12.83
	4H	12.00	12.69	12.44	13.11	13.56	11.62	12.31	12.06	12.73	13.18
	6H	12.36	12.95	12.83	13.40	13.87	11.96	12.55	12.43	13.00	13.47
	8H	12.49	13.04	12.96	13.49	13.96	12.07	12.62	12.54	13.07	13.55
	12H	12.59	13.08	13.08	13.56	14.04	12.14	12.63	12.63	13.11	13.59
8H	4H	12.10	12.65	12.57	13.10	13.57	11.75	12.30	12.22	12.75	13.22
	6H	12.56	13.01	13.07	13.51	13.99	12.21	12.65	12.71	13.15	13.64
	8H	12.76	13.17	13.29	13.68	14.18	12.39	12.80	12.92	13.32	13.81
	12H	12.95	13.31	13.47	13.80	14.38	12.55	12.90	13.07	13.40	13.98
12H	4H	12.08	12.57	12.57	13.05	13.53	11.74	12.22	12.23	12.71	13.18
	6H	12.57	12.97	13.10	13.49	13.99	12.22	12.63	12.75	13.15	13.64
	8H	12.82	13.18	13.34	13.68	14.25	12.47	12.83	12.99	13.32	13.90