

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: P845669

Luminaire Tested: SQ2R-WBM-100D-940-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845669
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-100D-940-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - WHITE BAFFLE, WIDE 80-DEGREE OPTIC
1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

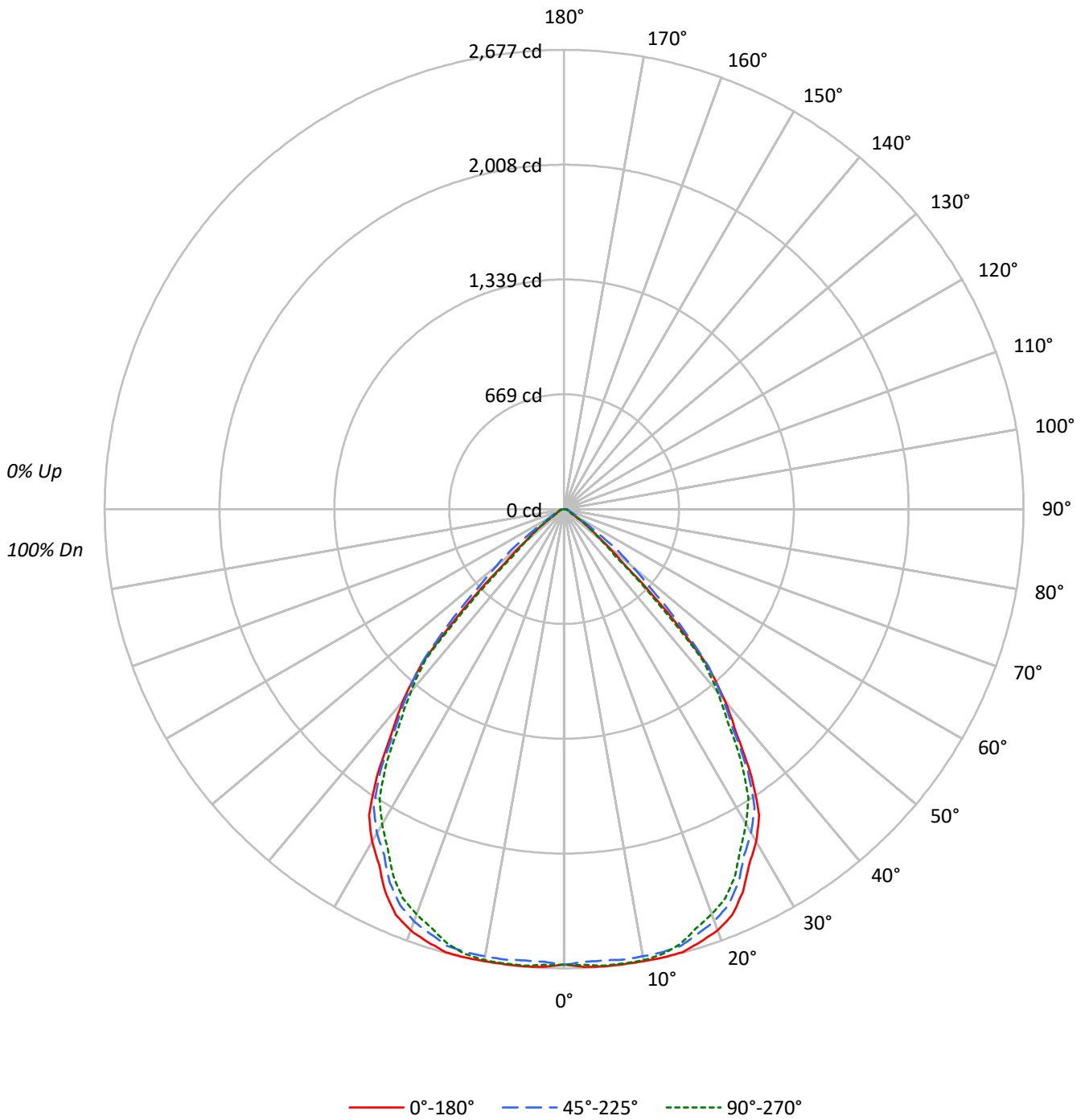
Lumens per Lamp: N/A
Luminaire Lumens: 4180.3 lumens
Efficiency: N/A
Efficacy: 119.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.19 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 34.9
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	85	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	61	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°	42883	42883	42883
5°	43357	42801	43295
10°	43858	43389	43765
15°	44684	44045	43855
20°	44916	43933	43178
25°	43885	42799	41985
30°	41732	40630	39528
35°	37507	36791	35477
40°	30823	30180	29297
45°	19505	21900	17589
50°	7568	12883	6945
55°	3651	5849	3704
60°	1724	2893	1602
65°	1528	1677	1456
70°	1530	1530	1440
75°	1429	1547	1310
80°	1423	1423	1237
85°	1408	1408	1056

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 21900 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.4	6.1
10°-20°	746.2	17.8
20°-30°	1104.9	26.4
30°-40°	1144.6	27.4
40°-50°	688.0	16.5
50°-60°	164.5	3.9
60°-70°	44.8	1.1
70°-80°	25.0	0.6
80°-90°	8.0	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°	2105.5	50.4
0°-40°	3250.1	77.7
0°-60°	4102.5	98.1
0°-90°	4180.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4180.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2656	2656	2656	2656	2656	
5°	2675	2666	2641	2675	2671	255
15°	2673	2690	2635	2637	2624	753
25°	2463	2486	2402	2372	2357	1127
35°	1903	1899	1867	1832	1800	1170
45°	854	959	959	908	770	653
55°	130	148	208	139	132	133
65°	40	42	44	40	38	41
75°	23	25	25	23	21	25
85°	8	8	8	8	6	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2656.0	2656.0	2656.0	2656.0	2656.0
2.5°	2671.3	2662.3	2640.8	2665.0	2659.1
5°	2675.1	2665.7	2640.8	2675.1	2671.3
7.5°	2675.1	2669.2	2648.0	2676.4	2670.9
10°	2675.1	2675.1	2646.5	2674.9	2669.4
12.5°	2676.6	2684.0	2645.0	2665.7	2657.2
15°	2673.2	2690.0	2635.0	2636.6	2623.6
17.5°	2644.6	2670.7	2595.0	2579.7	2561.8
20°	2614.1	2640.2	2556.9	2527.9	2513.0
22.5°	2560.7	2588.3	2498.9	2471.4	2455.0
25°	2463.4	2485.7	2402.4	2371.5	2356.7
27.5°	2334.5	2344.7	2272.4	2243.4	2227.0
30°	2238.4	2236.5	2179.3	2142.5	2120.2
32.5°	2114.9	2117.6	2064.9	2029.5	1999.7
35°	1902.9	1899.1	1866.6	1831.6	1799.9
37.5°	1650.0	1652.7	1618.0	1580.8	1568.4
40°	1462.4	1468.0	1431.9	1391.9	1390.0
42.5°	1233.6	1275.0	1248.9	1207.1	1199.3
45°	854.2	958.7	959.1	908.3	770.3
47.5°	475.1	605.6	683.7	539.2	403.1
50°	301.3	387.1	512.9	323.0	276.5
52.5°	214.3	256.8	380.2	230.5	201.7
55°	129.7	148.3	207.8	139.0	131.6
57.5°	79.3	95.7	121.6	94.2	78.6
60°	53.4	68.3	89.6	60.8	49.6
62.5°	47.3	51.7	69.8	48.8	45.0
65°	40.0	41.9	43.9	40.0	38.1
67.5°	35.5	37.4	37.0	35.5	33.6
70°	32.4	34.3	32.4	32.4	30.5
72.5°	29.4	29.7	29.4	27.8	27.5
75°	22.9	24.8	24.8	22.9	21.0
77.5°	18.3	19.8	18.3	18.3	16.4
80°	15.3	15.3	15.3	15.3	13.3
82.5°	12.2	12.2	12.2	12.2	10.3
85°	7.6	7.6	7.6	7.6	5.7
87.5°	3.1	3.1	3.1	1.5	1.5
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	10.18	11.36	10.54	11.67	11.98	9.77	10.95	10.14	11.27	11.58
	3H	10.72	11.75	11.10	12.08	12.45	10.32	11.35	10.70	11.68	12.05
	4H	10.98	11.94	11.39	12.30	12.68	10.57	11.53	10.98	11.88	12.27
	6H	11.21	12.09	11.63	12.46	12.86	10.78	11.65	11.19	12.03	12.42
	8H	11.29	12.12	11.73	12.51	12.92	10.84	11.67	11.27	12.06	12.47
	12H	11.35	12.14	11.79	12.53	12.96	10.87	11.66	11.31	12.05	12.48
4H	2H	10.23	11.19	10.64	11.55	11.93	9.87	10.83	10.27	11.18	11.57
	3H	10.99	11.77	11.41	12.17	12.58	10.63	11.41	11.04	11.81	12.22
	4H	11.39	12.08	11.82	12.50	12.94	11.01	11.70	11.44	12.12	12.56
	6H	11.75	12.34	12.21	12.79	13.26	11.35	11.94	11.81	12.39	12.86
	8H	11.87	12.43	12.35	12.88	13.35	11.46	12.01	11.93	12.46	12.93
	12H	11.98	12.46	12.47	12.95	13.42	11.53	12.01	12.02	12.50	12.98
8H	4H	11.48	12.04	11.96	12.48	12.96	11.13	11.69	11.61	12.13	12.61
	6H	11.95	12.40	12.46	12.90	13.38	11.59	12.04	12.10	12.54	13.03
	8H	12.15	12.55	12.68	13.07	13.57	11.78	12.19	12.31	12.70	13.20
	12H	12.34	12.69	12.85	13.19	13.76	11.94	12.29	12.45	12.79	13.36
12H	4H	11.47	11.95	11.96	12.44	12.91	11.12	11.61	11.61	12.09	12.57
	6H	11.96	12.36	12.49	12.88	13.38	11.61	12.02	12.14	12.53	13.03
	8H	12.21	12.57	12.73	13.07	13.64	11.86	12.21	12.38	12.71	13.29