

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: P845663

Luminaire Tested: SQ2R-WBM-050D-940-UNV-STD-W-4

Issue Date: 6/14/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P845663  
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-050D-940-UNV-STD-W-4  
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - WHITE BAFFLE, WIDE 80-DEGREE OPTIC  
500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

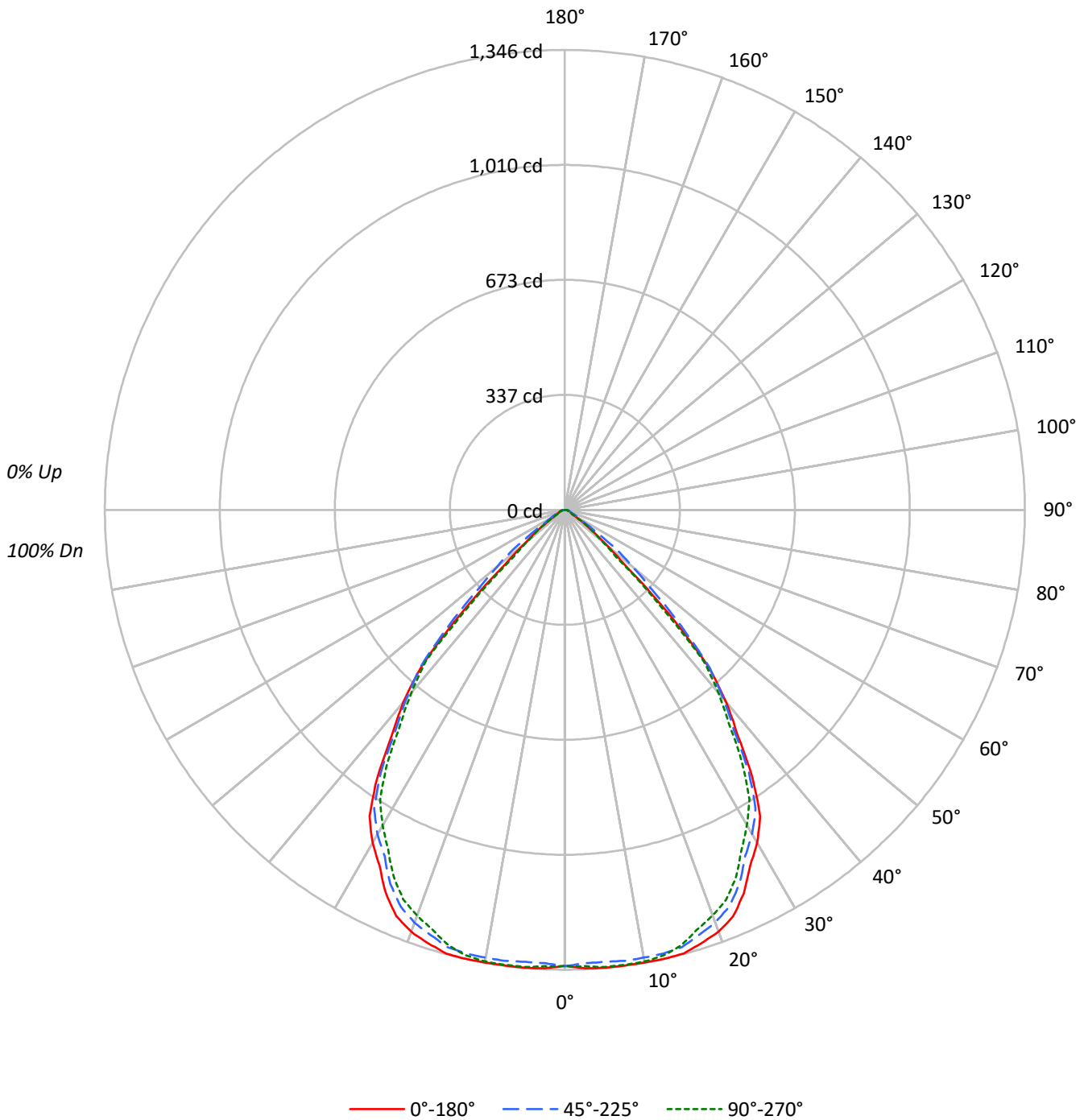
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2101.9 lumens  
Efficiency: N/A  
Efficacy: 126.6 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): 16.6  
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°	21563	21563	21563
5°	21801	21520	21768
10°	22053	21817	22005
15°	22467	22146	22051
20°	22584	22089	21711
25°	22066	21520	21111
30°	20983	20430	19876
35°	18859	18500	17838
40°	15498	15175	14731
45°	9807	11010	8843
50°	3805	6478	3491
55°	1835	2942	1863
60°	865	1456	804
65°	768	844	734
70°	769	769	722
75°	717	780	655
80°	716	716	623
85°	704	704	537

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 11010 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.9	6.1
10°-20°	375.2	17.8
20°-30°	555.6	26.4
30°-40°	575.5	27.4
40°-50°	345.9	16.5
50°-60°	82.7	3.9
60°-70°	22.5	1.1
70°-80°	12.6	0.6
80°-90°	4.0	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°	1058.7	50.4
0°-40°	1634.2	77.7
0°-60°	2062.8	98.1
0°-90°	2101.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2101.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1336	1336	1336	1336	1336	
5°	1345	1340	1328	1345	1343	128
15°	1344	1352	1325	1326	1319	379
25°	1239	1250	1208	1192	1185	567
35°	957	955	939	921	905	589
45°	430	482	482	457	387	328
55°	65	75	104	70	66	67
65°	20	21	22	20	19	21
75°	12	12	12	12	10	13
85°	4	4	4	4	3	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1335.5	1335.5	1335.5	1335.5	1335.5
2.5°	1343.1	1338.6	1327.8	1340.0	1337.0
5°	1345.1	1340.4	1327.8	1345.1	1343.1
7.5°	1345.1	1342.1	1331.4	1345.7	1342.9
10°	1345.1	1345.1	1330.7	1345.0	1342.2
12.5°	1345.8	1349.6	1329.9	1340.4	1336.0
15°	1344.1	1352.5	1324.9	1325.7	1319.2
17.5°	1329.7	1342.8	1304.8	1297.1	1288.1
20°	1314.4	1327.5	1285.6	1271.0	1263.6
22.5°	1287.5	1301.4	1256.5	1242.7	1234.4
25°	1238.6	1249.9	1208.0	1192.4	1185.0
27.5°	1173.8	1178.9	1142.6	1128.0	1119.8
30°	1125.5	1124.6	1095.8	1077.3	1066.1
32.5°	1063.4	1064.7	1038.3	1020.4	1005.5
35°	956.8	954.9	938.6	920.9	905.0
37.5°	829.7	831.0	813.6	794.9	788.6
40°	735.3	738.1	720.0	699.8	698.9
42.5°	620.3	641.1	627.9	607.0	603.0
45°	429.5	482.0	482.2	456.7	387.3
47.5°	238.9	304.5	343.8	271.1	202.7
50°	151.5	194.6	257.9	162.4	139.0
52.5°	107.8	129.1	191.2	115.9	101.4
55°	65.2	74.6	104.5	69.9	66.2
57.5°	39.9	48.1	61.2	47.4	39.5
60°	26.8	34.3	45.1	30.6	24.9
62.5°	23.8	26.0	35.1	24.5	22.6
65°	20.1	21.1	22.1	20.1	19.2
67.5°	17.8	18.8	18.6	17.8	16.9
70°	16.3	17.3	16.3	16.3	15.3
72.5°	14.8	15.0	14.8	14.0	13.8
75°	11.5	12.5	12.5	11.5	10.5
77.5°	9.2	10.0	9.2	9.2	8.2
80°	7.7	7.7	7.7	7.7	6.7
82.5°	6.1	6.1	6.1	6.1	5.2
85°	3.8	3.8	3.8	3.8	2.9
87.5°	1.5	1.5	1.5	0.8	0.8
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	7.79	8.97	8.15	9.28	9.59	7.39	8.57	7.75	8.88	9.19
	3H	8.33	9.36	8.71	9.70	10.06	7.93	8.97	8.31	9.30	9.66
	4H	8.60	9.56	9.00	9.91	10.29	8.18	9.14	8.59	9.49	9.88
	6H	8.82	9.70	9.24	10.07	10.47	8.39	9.26	8.80	9.64	10.03
	8H	8.91	9.73	9.34	10.13	10.53	8.45	9.28	8.89	9.67	10.08
	12H	8.96	9.75	9.40	10.14	10.57	8.48	9.28	8.92	9.66	10.09
4H	2H	7.84	8.80	8.25	9.16	9.54	7.48	8.44	7.89	8.79	9.18
	3H	8.60	9.38	9.02	9.79	10.19	8.24	9.02	8.66	9.43	9.83
	4H	9.00	9.69	9.44	10.11	10.56	8.62	9.31	9.05	9.73	10.17
	6H	9.36	9.95	9.83	10.40	10.87	8.96	9.55	9.42	10.00	10.47
	8H	9.49	10.04	9.96	10.49	10.96	9.07	9.62	9.54	10.07	10.54
	12H	9.59	10.08	10.08	10.56	11.04	9.14	9.63	9.63	10.11	10.59
8H	4H	9.10	9.65	9.57	10.10	10.57	8.74	9.30	9.22	9.75	10.22
	6H	9.56	10.01	10.07	10.51	11.00	9.21	9.65	9.71	10.15	10.64
	8H	9.76	10.17	10.29	10.69	11.18	9.39	9.80	9.92	10.32	10.81
	12H	9.95	10.30	10.47	10.80	11.38	9.55	9.91	10.07	10.40	10.98
12H	4H	9.08	9.57	9.57	10.05	10.53	8.73	9.22	9.22	9.70	10.18
	6H	9.57	9.98	10.10	10.50	10.99	9.22	9.63	9.75	10.15	10.64
	8H	9.83	10.18	10.34	10.68	11.26	9.47	9.83	9.99	10.32	10.90