

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: P845574

Luminaire Tested: SQ2R-PH1-075D-930-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845574
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-10)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-PH1-075D-930-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS
750 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

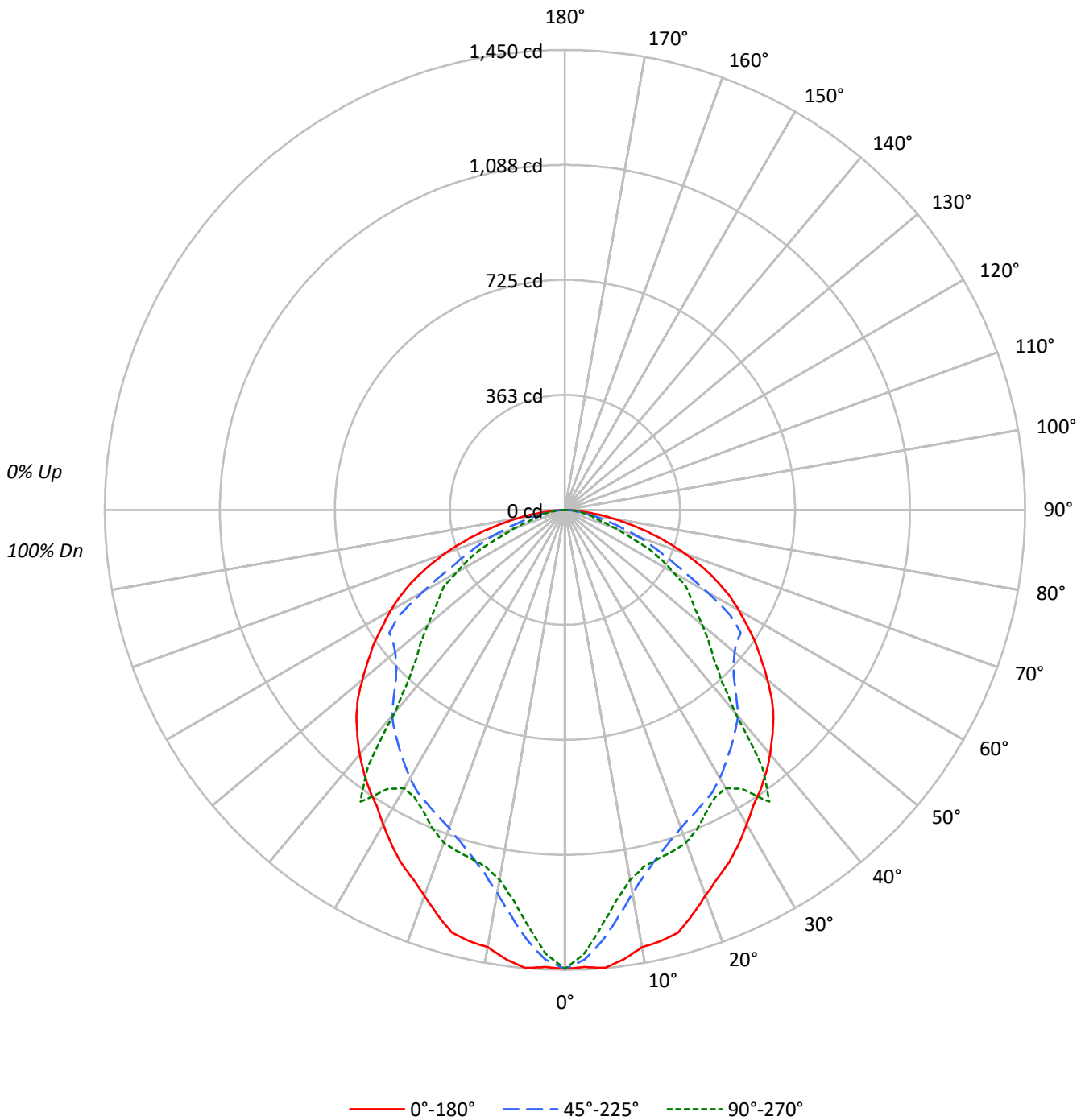
Lumens per Lamp: N/A
Luminaire Lumens: 3196.3 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.03 / 1.23
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 26.7
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	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85				
2	100	92	86	80	97	90	84	79	87	82	77	84	79	76	81	77	74	72				
3	91	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61				
4	84	72	64	57	82	71	63	57	69	62	56	66	60	55	64	59	55	53				
5	77	65	56	50	75	64	56	49	62	54	49	60	53	48	58	52	48	46				
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40				
7	66	53	45	39	65	52	44	38	51	44	38	49	43	38	48	42	38	36				
8	62	49	40	35	60	48	40	34	47	39	34	45	39	34	44	38	34	32				
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29				
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23358	23358	23358
5°	23493	22088	21350
10°	22951	20108	19408
15°	23056	18913	19029
20°	22232	18330	19182
25°	21825	18244	18736
30°	21353	18196	18888
35°	21191	17988	22139
40°	21208	17871	17553
45°	21217	17194	15118
50°	20919	17530	14177
55°	20653	19026	13602
60°	20447	16669	12758
65°	20088	13517	11095
70°	18973	11500	7926
75°	16918	8671	6014
80°	13826	5635	5635
85°	8670	5094	3816

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 21217 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.6	4.0
10°-20°	334.6	10.5
20°-30°	490.7	15.4
30°-40°	594.8	18.6
40°-50°	584.3	18.3
50°-60°	509.0	15.9
60°-70°	352.9	11.0
70°-80°	166.6	5.2
80°-90°	35.8	1.1
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°	952.9	29.8
0°-40°	1547.7	48.4
0°-60°	2641.0	82.6
0°-90°	3196.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3196.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1447	1447	1447	1447	1447	
5°	1450	1448	1363	1320	1317	136
15°	1379	1225	1132	1123	1138	385
25°	1225	1038	1024	1056	1052	564
35°	1075	864	913	988	1123	673
45°	929	683	753	782	662	715
55°	734	531	676	487	483	655
65°	526	365	354	290	290	517
75°	271	186	139	99	96	287
85°	47	30	28	22	21	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1446.7	1446.7	1446.7	1446.7	1446.7
2.5°	1442.6	1461.9	1419.2	1402.7	1399.9
5°	1449.5	1448.1	1362.8	1320.1	1317.3
7.5°	1428.8	1391.7	1292.6	1244.4	1241.6
10°	1399.9	1335.2	1226.5	1183.8	1183.8
12.5°	1393.0	1281.5	1172.8	1143.9	1152.1
15°	1379.3	1225.1	1131.5	1123.2	1138.4
17.5°	1338.0	1171.4	1097.1	1110.9	1128.7
20°	1293.9	1130.1	1066.8	1099.8	1116.4
22.5°	1256.8	1090.2	1044.8	1081.9	1088.8
25°	1225.1	1037.9	1024.1	1055.8	1051.7
27.5°	1186.6	991.1	1004.9	1024.1	1022.8
30°	1145.3	949.8	976.0	995.2	1013.1
32.5°	1105.3	901.6	944.3	996.6	1043.4
35°	1075.1	864.5	912.6	988.3	1123.2
37.5°	1042.0	819.0	881.0	941.5	1020.0
40°	1006.2	769.5	847.9	931.9	832.8
42.5°	967.7	730.9	798.4	914.0	729.6
45°	929.2	682.8	753.0	781.9	662.1
47.5°	885.1	647.0	719.9	664.9	613.9
50°	832.8	611.2	697.9	594.7	564.4
52.5°	781.9	574.0	682.8	536.8	518.9
55°	733.7	531.3	675.9	487.3	483.2
57.5°	681.4	488.7	618.1	441.9	452.9
60°	633.2	447.4	516.2	403.3	395.1
62.5°	582.3	407.5	421.2	353.8	345.5
65°	525.8	364.8	353.8	290.4	290.4
67.5°	465.3	320.7	297.3	250.5	214.7
70°	401.9	278.1	243.6	190.0	167.9
72.5°	334.5	232.6	188.6	147.3	121.1
75°	271.2	185.8	139.0	99.1	96.4
77.5°	207.9	141.8	101.9	77.1	77.1
80°	148.7	101.9	60.6	59.2	60.6
82.5°	93.6	61.9	41.3	44.0	44.0
85°	46.8	30.3	27.5	22.0	20.6
87.5°	12.4	11.0	6.9	6.9	6.9
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	22.09	23.67	22.45	23.99	24.30	20.80	22.39	21.16	22.70	23.01
	3H	24.17	25.60	24.54	25.92	26.28	21.88	23.31	22.26	23.64	24.00
	4H	24.93	26.28	25.33	26.62	27.00	22.13	23.47	22.53	23.82	24.20
	6H	25.46	26.70	25.87	27.06	27.46	22.31	23.55	22.72	23.92	24.31
	8H	25.60	26.79	26.03	27.18	27.58	22.36	23.55	22.79	23.94	24.34
	12H	25.67	26.81	26.10	27.19	27.62	22.38	23.52	22.81	23.90	24.33
4H	2H	22.55	23.90	22.95	24.24	24.62	21.52	22.87	21.92	23.21	23.59
	3H	24.72	25.84	25.13	26.24	26.64	22.77	23.89	23.18	24.28	24.69
	4H	25.57	26.57	26.00	26.99	27.43	23.07	24.08	23.51	24.49	24.93
	6H	26.19	27.07	26.65	27.51	27.97	23.32	24.20	23.78	24.64	25.10
	8H	26.38	27.20	26.84	27.64	28.11	23.39	24.21	23.86	24.66	25.12
	12H	26.48	27.22	26.96	27.69	28.16	23.43	24.17	23.92	24.64	25.11
8H	4H	25.64	26.46	26.10	26.90	27.37	23.34	24.16	23.80	24.60	25.07
	6H	26.32	27.00	26.82	27.49	27.97	23.64	24.32	24.14	24.81	25.29
	8H	26.55	27.16	27.07	27.67	28.16	23.75	24.36	24.26	24.87	25.35
	12H	26.70	27.24	27.21	27.73	28.29	23.83	24.36	24.34	24.86	25.42
12H	4H	25.63	26.36	26.11	26.84	27.31	23.37	24.11	23.85	24.58	25.05
	6H	26.30	26.91	26.81	27.42	27.90	23.68	24.29	24.19	24.79	25.28
	8H	26.57	27.10	27.08	27.60	28.16	23.83	24.36	24.34	24.85	25.42