

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: P845584

Luminaire Tested: SQ2R-PH1-125D-835-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845584
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-PH1-125D-835-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS
1250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

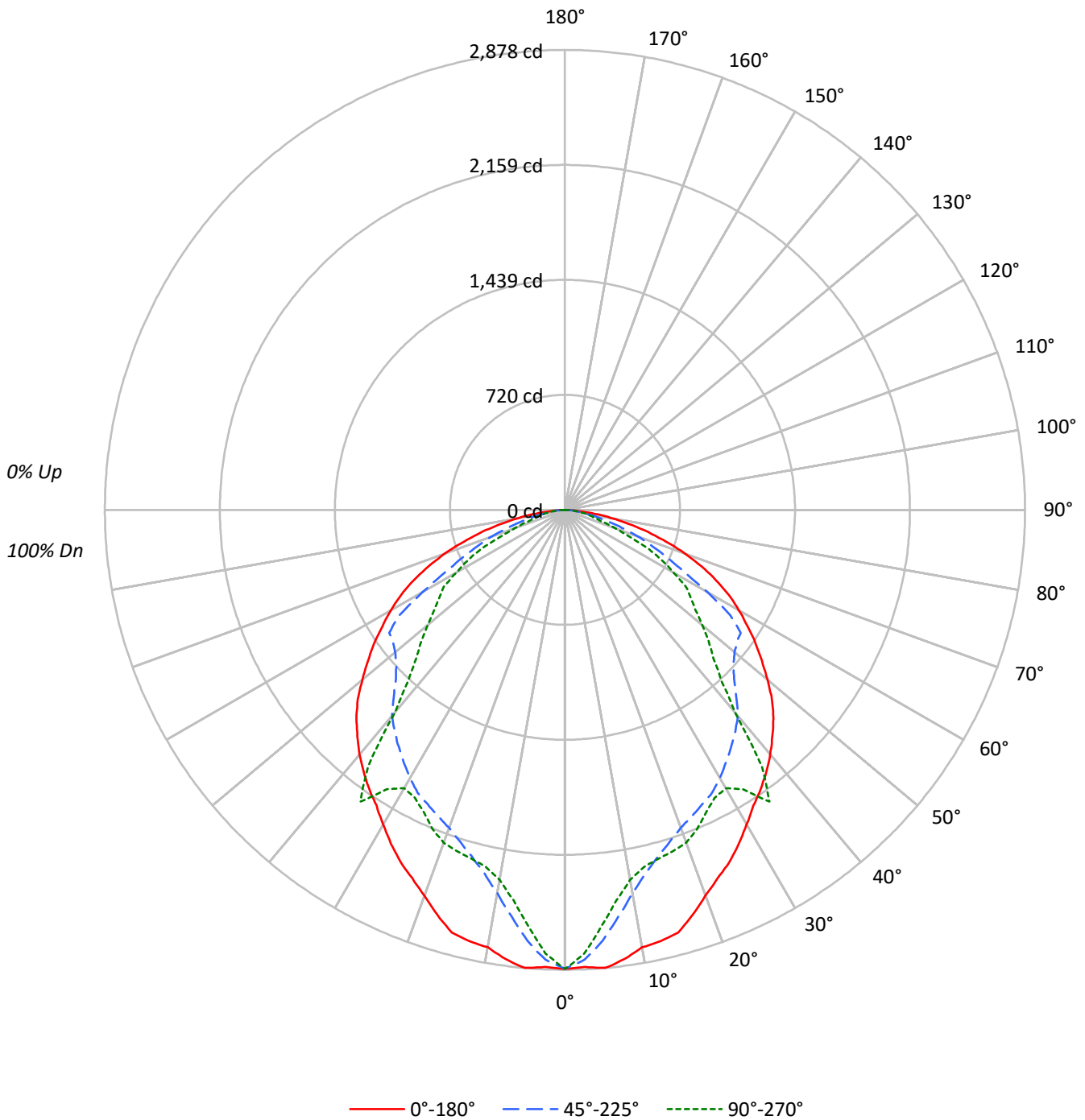
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6346.0 lumens
Efficiency: N/A
Efficacy: 129.0 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): 49.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9979
Total Harmonic Distortion (THDi): 0.0523
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 3 HR
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	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°	46377	46377	46377
5°	46644	43853	42391
10°	45570	39923	38535
15°	45775	37553	37780
20°	44141	36393	38084
25°	43333	36225	37198
30°	42394	36126	37502
35°	42072	35715	43958
40°	42107	35483	34851
45°	42124	34136	30017
50°	41533	34804	28145
55°	41005	37774	27004
60°	40597	33096	25330
65°	39885	26835	22032
70°	37671	22834	15739
75°	33587	17218	11934
80°	27448	11186	11186
85°	17210	10133	7595

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 42124 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.4	4.0
10°-20°	664.3	10.5
20°-30°	974.2	15.4
30°-40°	1180.9	18.6
40°-50°	1160.1	18.3
50°-60°	1010.6	15.9
60°-70°	700.7	11.0
70°-80°	330.7	5.2
80°-90°	71.2	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°	1891.9	29.8
0°-40°	3072.8	48.4
0°-60°	5243.5	82.6
0°-90°	6346.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6346.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2872	2872	2872	2872	2872	
5°	2878	2875	2706	2621	2616	271
15°	2738	2432	2247	2230	2260	765
25°	2432	2061	2033	2096	2088	1119
35°	2134	1716	1812	1962	2230	1337
45°	1845	1356	1495	1552	1315	1419
55°	1457	1055	1342	968	959	1301
65°	1044	724	702	577	577	1027
75°	538	369	276	197	191	570
85°	93	60	55	44	41	123
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2872.4	2872.4	2872.4	2872.4	2872.4
2.5°	2864.2	2902.5	2817.8	2785.0	2779.5
5°	2877.9	2875.1	2705.7	2621.0	2615.5
7.5°	2836.9	2763.1	2566.3	2470.7	2465.2
10°	2779.5	2651.0	2435.1	2350.4	2350.4
12.5°	2765.8	2544.5	2328.5	2271.1	2287.5
15°	2738.5	2432.4	2246.6	2230.2	2260.2
17.5°	2656.5	2325.8	2178.2	2205.6	2241.1
20°	2569.0	2243.8	2118.1	2183.7	2216.5
22.5°	2495.3	2164.6	2074.4	2148.2	2161.8
25°	2432.4	2060.7	2033.4	2096.2	2088.0
27.5°	2355.9	1967.8	1995.1	2033.4	2030.6
30°	2273.9	1885.8	1937.7	1976.0	2011.5
32.5°	2194.6	1790.1	1874.9	1978.7	2071.6
35°	2134.5	1716.3	1812.0	1962.3	2230.2
37.5°	2068.9	1626.2	1749.1	1869.4	2025.2
40°	1997.8	1527.8	1683.5	1850.3	1653.5
42.5°	1921.3	1451.2	1585.2	1814.7	1448.5
45°	1844.8	1355.6	1495.0	1552.4	1314.6
47.5°	1757.3	1284.5	1429.4	1320.1	1218.9
50°	1653.5	1213.5	1385.6	1180.7	1120.5
52.5°	1552.4	1139.7	1355.6	1065.9	1030.4
55°	1456.7	1054.9	1341.9	967.5	959.3
57.5°	1352.9	970.2	1227.1	877.3	899.2
60°	1257.2	888.2	1024.9	800.8	784.4
62.5°	1156.1	809.0	836.3	702.4	686.0
65°	1044.0	724.3	702.4	576.7	576.7
67.5°	923.8	636.8	590.3	497.4	426.4
70°	798.0	552.1	483.7	377.2	333.4
72.5°	664.1	461.9	374.4	292.4	240.5
75°	538.4	369.0	276.0	196.8	191.3
77.5°	412.7	281.5	202.2	153.0	153.0
80°	295.2	202.2	120.3	117.5	120.3
82.5°	185.8	123.0	82.0	87.5	87.5
85°	92.9	60.1	54.7	43.7	41.0
87.5°	24.6	21.9	13.7	13.7	13.7
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	24.47	26.06	24.83	26.37	26.69	23.18	24.77	23.54	25.08	25.40
	3H	26.55	27.98	26.93	28.31	28.67	24.27	25.70	24.64	26.02	26.38
	4H	27.32	28.66	27.71	29.01	29.38	24.51	25.86	24.91	26.20	26.58
	6H	27.84	29.08	28.25	29.45	29.84	24.69	25.94	25.10	26.30	26.69
	8H	27.98	29.17	28.41	29.56	29.96	24.74	25.93	25.17	26.32	26.72
	12H	28.05	29.19	28.48	29.57	30.00	24.77	25.90	25.20	26.28	26.71
4H	2H	24.93	26.28	25.33	26.63	27.00	23.90	25.25	24.30	25.60	25.97
	3H	27.10	28.22	27.51	28.62	29.02	25.15	26.27	25.56	26.67	27.07
	4H	27.95	28.96	28.38	29.37	29.81	25.46	26.46	25.89	26.88	27.31
	6H	28.58	29.45	29.03	29.89	30.35	25.70	26.58	26.16	27.02	27.48
	8H	28.76	29.58	29.22	30.02	30.49	25.78	26.60	26.24	27.04	27.50
	12H	28.86	29.60	29.35	30.07	30.54	25.82	26.55	26.30	27.03	27.50
8H	4H	28.02	28.84	28.49	29.29	29.75	25.73	26.54	26.19	26.99	27.45
	6H	28.71	29.38	29.20	29.87	30.35	26.03	26.70	26.52	27.19	27.67
	8H	28.94	29.54	29.45	30.05	30.54	26.14	26.74	26.65	27.25	27.74
	12H	29.08	29.62	29.59	30.11	30.67	26.21	26.75	26.72	27.24	27.80
12H	4H	28.01	28.74	28.49	29.22	29.69	25.76	26.49	26.24	26.97	27.44
	6H	28.68	29.29	29.20	29.80	30.29	26.06	26.67	26.57	27.18	27.66
	8H	28.95	29.49	29.46	29.98	30.54	26.21	26.75	26.72	27.24	27.80