

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: P845611

Luminaire Tested: SQ2R-PP3-125D-935-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845611
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-PP3-125D-935-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS
1250 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

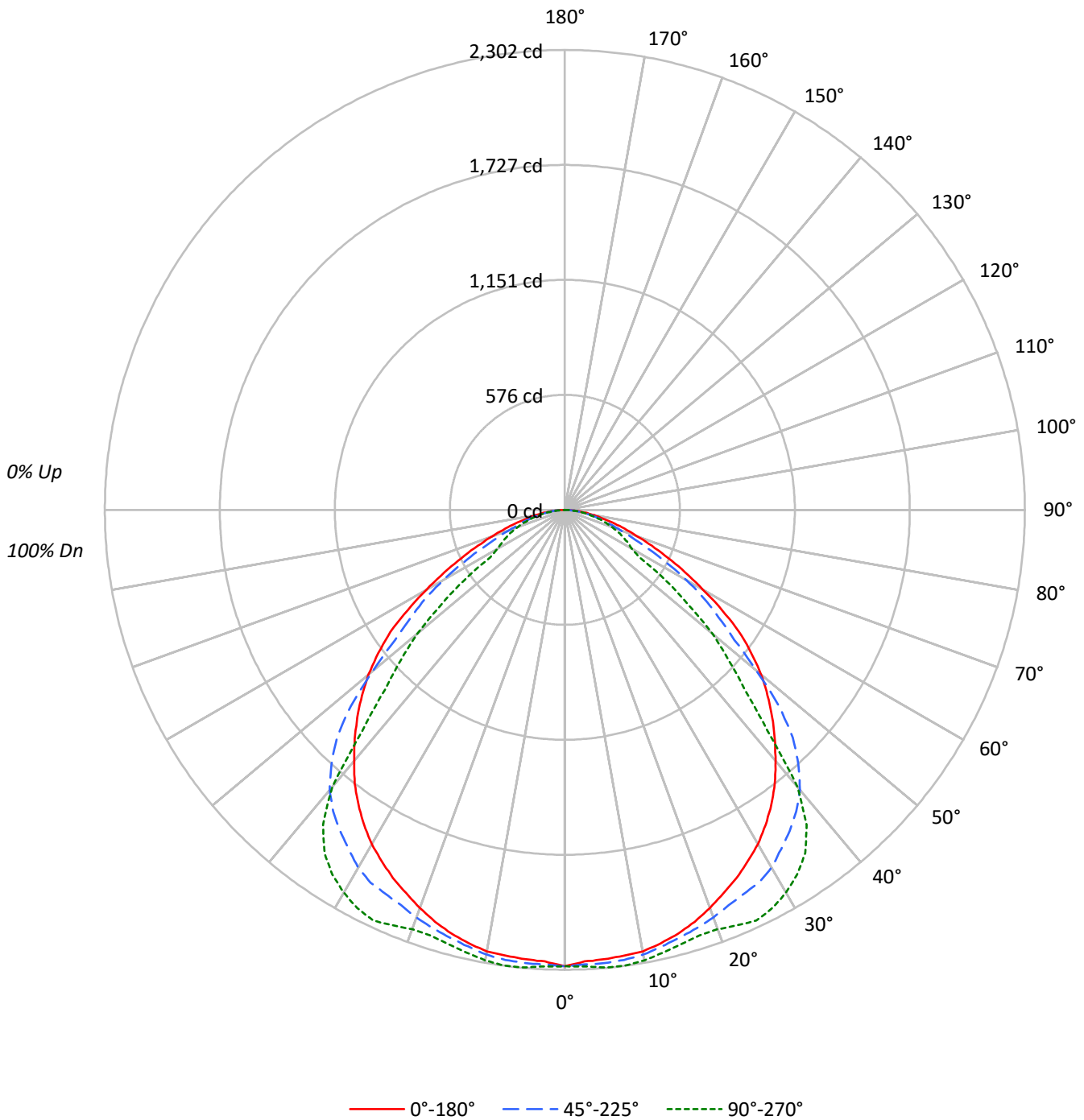
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5754.8 lumens
Efficiency: N/A
Efficacy: 117.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.41 / 1.4
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	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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	89	87				87
2	101	94	88	82	99	92	86	82	88	84	80	85	81	78	82	79	76	74				74
3	93	83	76	70	91	82	75	69	79	73	68	76	71	67	74	69	66	64				64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	61	57	55				55
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49				49
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43				43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38				38
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34				34
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31				31
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	36887	36887	36887
5°	36598	36911	37263
10°	36784	37061	37536
15°	36695	37058	37623
20°	36433	37304	38383
25°	36227	37775	40399
30°	36019	38542	41243
35°	35510	38652	41319
40°	34562	38583	38177
45°	33529	36838	29060
50°	32212	31423	24204
55°	29979	26446	17405
60°	25814	22695	12478
65°	21776	17532	12271
70°	18128	13794	11745
75°	15365	11903	10998
80°	13027	10330	9884
85°	10282	8503	5372

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 36838 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.6	3.8
10°-20°	629.8	10.9
20°-30°	987.0	17.2
30°-40°	1218.7	21.2
40°-50°	1147.3	19.9
50°-60°	811.0	14.1
60°-70°	460.8	8.0
70°-80°	228.2	4.0
80°-90°	54.4	0.9
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°	1834.3	31.9
0°-40°	3053.0	53.1
0°-60°	5011.4	87.1
0°-90°	5754.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5754.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2285	2285	2285	2285	2285	
5°	2258	2299	2277	2282	2299	215
15°	2195	2227	2217	2239	2251	619
25°	2034	2087	2120	2205	2268	937
35°	1802	1852	1961	2072	2096	1125
45°	1468	1582	1613	1369	1273	1131
55°	1065	1130	940	710	618	941
65°	570	601	459	324	321	571
75°	246	273	191	179	176	266
85°	56	51	46	36	29	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2284.6	2284.6	2284.6	2284.6	2284.6
2.5°	2262.9	2304.0	2277.4	2282.2	2287.1
5°	2258.1	2299.1	2277.4	2282.2	2299.1
7.5°	2250.8	2294.3	2272.6	2279.8	2301.5
10°	2243.6	2279.8	2260.5	2272.6	2289.5
12.5°	2221.9	2255.7	2238.8	2255.7	2270.2
15°	2195.3	2226.7	2217.0	2238.8	2250.8
17.5°	2161.5	2197.7	2195.3	2224.3	2233.9
20°	2120.4	2166.3	2171.1	2209.8	2233.9
22.5°	2076.9	2132.5	2142.2	2204.9	2250.8
25°	2033.5	2086.6	2120.4	2204.9	2267.7
27.5°	1982.8	2035.9	2103.5	2197.7	2248.4
30°	1932.0	1982.8	2067.3	2166.3	2212.2
32.5°	1869.3	1922.4	2014.2	2122.8	2163.9
35°	1801.6	1852.3	1961.0	2072.1	2096.3
37.5°	1726.8	1779.9	1903.1	1977.9	1987.6
40°	1639.8	1714.7	1830.6	1842.7	1811.3
42.5°	1555.3	1656.7	1729.2	1666.4	1499.7
45°	1468.4	1581.9	1613.3	1369.3	1272.7
47.5°	1376.6	1490.1	1453.9	1178.5	1110.9
50°	1282.4	1388.7	1251.0	1026.4	963.6
52.5°	1176.1	1267.9	1069.9	881.5	777.6
55°	1065.0	1130.2	939.5	710.0	618.3
57.5°	932.2	980.5	828.4	557.9	442.0
60°	799.4	835.6	702.8	437.1	386.4
62.5°	678.6	710.0	572.4	364.7	355.0
65°	570.0	601.3	458.9	323.6	321.2
67.5°	470.9	504.7	367.1	289.8	287.4
70°	384.0	420.2	292.2	253.6	248.8
72.5°	311.5	345.4	236.7	214.9	212.5
75°	246.3	272.9	190.8	178.7	176.3
77.5°	188.4	207.7	149.7	142.5	140.1
80°	140.1	147.3	111.1	108.7	106.3
82.5°	96.6	91.8	77.3	74.9	70.0
85°	55.5	50.7	45.9	36.2	29.0
87.5°	21.7	21.7	9.7	7.2	7.2
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	23.98	25.50	24.35	25.82	26.13	20.39	21.91	20.75	22.22	22.54
	3H	25.13	26.49	25.51	26.82	27.18	21.54	22.90	21.91	23.23	23.59
	4H	25.50	26.78	25.90	27.12	27.50	22.03	23.30	22.43	23.65	24.03
	6H	25.75	26.92	26.16	27.29	27.68	22.41	23.58	22.82	23.95	24.34
	8H	25.81	26.93	26.24	27.32	27.72	22.51	23.63	22.93	24.02	24.42
	12H	25.85	26.92	26.28	27.30	27.73	22.54	23.61	22.97	24.00	24.43
4H	2H	24.17	25.44	24.57	25.79	26.17	21.18	22.45	21.58	22.80	23.18
	3H	25.54	26.59	25.95	26.99	27.39	22.48	23.54	22.89	23.94	24.34
	4H	26.04	26.98	26.47	27.40	27.84	23.06	24.01	23.50	24.42	24.86
	6H	26.41	27.23	26.87	27.67	28.13	23.54	24.36	23.99	24.80	25.26
	8H	26.51	27.28	26.98	27.73	28.19	23.67	24.44	24.13	24.88	25.35
	12H	26.58	27.26	27.06	27.74	28.21	23.73	24.41	24.21	24.89	25.36
8H	4H	26.10	26.87	26.57	27.31	27.78	23.38	24.15	23.84	24.59	25.06
	6H	26.55	27.19	27.05	27.68	28.16	23.95	24.58	24.44	25.07	25.55
	8H	26.71	27.28	27.23	27.79	28.28	24.13	24.71	24.65	25.22	25.70
	12H	26.82	27.33	27.33	27.82	28.39	24.23	24.74	24.74	25.23	25.80
12H	4H	26.09	26.78	26.57	27.25	27.72	23.42	24.10	23.90	24.58	25.05
	6H	26.54	27.12	27.06	27.63	28.11	24.00	24.57	24.51	25.08	25.57
	8H	26.74	27.25	27.25	27.74	28.30	24.24	24.74	24.75	25.23	25.80