

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: P845563

Luminaire Tested: SQ2R-PC3-125D-935-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845563
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-6)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-PC3-125D-935-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS
1250 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

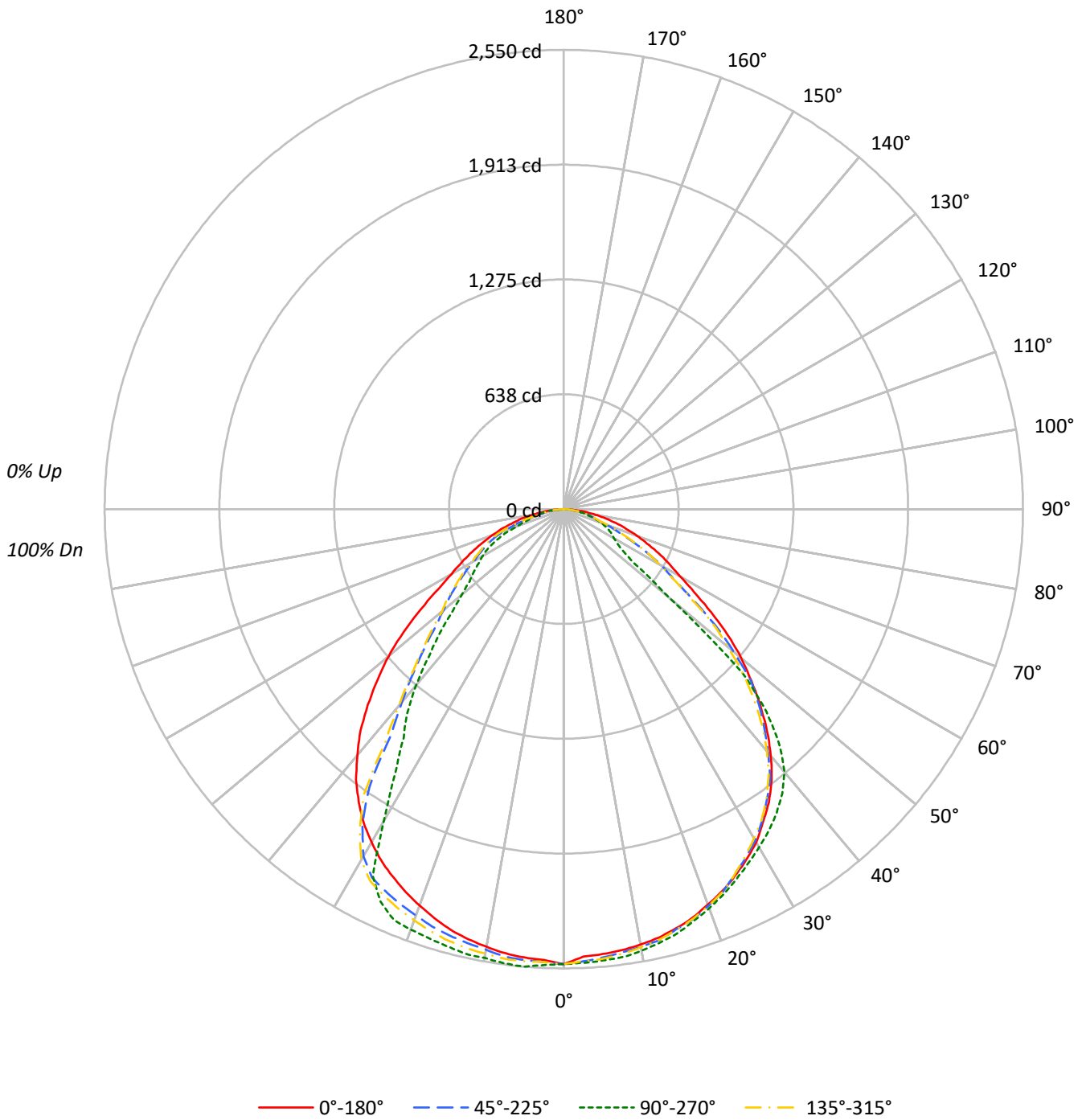
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5663.4 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.21 / 1.25
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

TEST NUMBER: P845563
CATALOG NUMBER: SQ2R-PC3-125D-935-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER: P845563

CATALOG NUMBER: SQ2R-PC3-125D-935-UNV-STD-W-4

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	108	104	100	97	100	97	94	96	94	91	92	90	89	87				87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				75
3	93	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	65				65
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	63	59	57				57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	56	52	50				50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44				44
7	69	57	48	43	67	56	48	42	54	47	42	53	47	42	52	46	42	40				40
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36				36
9	60	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33				33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	31	41	35	31	30				30

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	40788	40788	40788	40788
5°	40199	40786	40512	41334
10°	40268	40822	40466	41496
15°	40287	40772	40450	41984
20°	40168	40541	40251	42699
25°	40055	40399	40098	42852
30°	39847	40432	39802	37190
35°	39129	40603	39129	30561
40°	37719	40213	37565	26877
45°	35237	36340	35127	22224
50°	32332	19170	31908	18502
55°	28144	11082	27192	17199
60°	24019	10372	23240	16847
65°	22235	10609	21498	15962
70°	20408	10376	19836	12656
75°	18684	9339	18079	11447
80°	16616	8312	15723	11455
85°	12523	4483	11634	5817

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 36340 cd/sqm

TEST NUMBER: P845563

CATALOG NUMBER: SQ2R-PC3-125D-935-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.6	4.2
10°-20°	692.0	12.2
20°-30°	1057.4	18.7
30°-40°	1195.1	21.1
40°-50°	1044.6	18.4
50°-60°	691.2	12.2
60°-70°	451.6	8.0
70°-80°	236.3	4.2
80°-90°	55.7	1.0
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°	1988.9	35.1
0°-40°	3184.0	56.2
0°-60°	4919.8	86.9
0°-90°	5663.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5663.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2526	2526	2526	2526	2526	
5°	2480	2516	2500	2550	2480	236
15°	2410	2439	2420	2512	2410	680
25°	2248	2268	2251	2405	2248	1036
35°	1985	2060	1985	1550	1985	1237
45°	1543	1592	1538	973	1543	1188
55°	1000	394	966	611	1000	897
65°	582	278	563	418	582	576
75°	300	150	290	184	300	318
85°	68	24	63	31	68	82
90°	0	0	0	0	0	



TEST NUMBER: P845563

CATALOG NUMBER: SQ2R-PC3-125D-935-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	2526.2	2526.2	2526.2	2526.2	2526.2	2526.2	2526.2	2526.2	2526.2	2526.2	2526.2
2.5°	2487.5	2550.3	2514.1	2511.7	2521.3	2523.7	2511.7	2538.2	2506.8	2540.6	2516.5
5°	2480.3	2543.1	2499.6	2494.8	2516.5	2509.2	2506.8	2531.0	2499.6	2526.2	2514.1
7.5°	2470.6	2528.6	2482.7	2480.3	2509.2	2499.6	2489.9	2518.9	2487.5	2516.5	2506.8
10°	2456.1	2506.8	2468.2	2470.6	2489.9	2480.3	2470.6	2494.8	2468.2	2504.4	2485.1
12.5°	2436.8	2487.5	2451.3	2444.0	2465.8	2448.9	2448.9	2468.2	2446.5	2485.1	2468.2
15°	2410.2	2460.9	2415.1	2419.9	2439.2	2422.3	2417.5	2441.6	2419.9	2458.5	2451.3
17.5°	2378.8	2422.3	2388.5	2390.9	2398.2	2390.9	2386.1	2405.4	2383.7	2424.7	2429.5
20°	2337.8	2388.5	2345.0	2345.0	2359.5	2340.2	2345.0	2361.9	2342.6	2390.9	2400.6
22.5°	2296.7	2345.0	2304.0	2304.0	2316.0	2289.5	2301.6	2313.6	2299.1	2352.3	2374.0
25°	2248.4	2287.1	2241.2	2255.7	2267.7	2243.6	2241.2	2260.5	2250.8	2304.0	2342.6
27.5°	2195.3	2229.1	2185.6	2204.9	2217.0	2200.1	2178.4	2202.5	2197.7	2258.1	2306.4
30°	2137.3	2168.7	2125.3	2151.8	2168.7	2144.6	2110.8	2132.5	2134.9	2204.9	2224.3
32.5°	2060.0	2091.4	2050.4	2093.9	2118.0	2084.2	2045.6	2057.6	2067.3	2137.3	2081.8
35°	1985.2	1999.7	1968.3	2023.8	2060.0	2019.0	1961.0	1975.5	1985.2	2064.9	1883.7
37.5°	1895.8	1895.8	1883.7	1944.1	1992.4	1932.0	1869.3	1876.5	1895.8	1963.4	1569.8
40°	1789.6	1775.1	1763.0	1842.7	1907.9	1828.2	1753.3	1755.7	1782.3	1799.2	1398.3
42.5°	1671.2	1654.3	1649.5	1734.0	1772.7	1707.4	1630.2	1632.6	1671.2	1572.2	1238.9
45°	1543.2	1536.0	1531.1	1589.1	1591.5	1550.5	1494.9	1507.0	1538.4	1357.3	1096.4
47.5°	1412.8	1408.0	1405.6	1359.7	1350.0	1321.0	1350.0	1376.6	1403.1	1132.7	966.0
50°	1287.2	1253.4	1234.1	1065.0	763.2	1048.1	1188.2	1234.1	1270.3	987.8	869.4
52.5°	1149.6	1120.6	1060.2	813.9	483.0	809.0	1040.9	1098.9	1120.6	898.4	797.0
55°	999.8	999.8	869.4	521.7	393.7	548.2	854.9	982.9	966.0	804.2	714.9
57.5°	857.3	886.3	722.1	350.2	347.8	350.2	717.3	874.3	826.0	729.3	647.2
60°	743.8	787.3	625.5	311.5	321.2	306.7	613.4	777.6	719.7	649.7	572.4
62.5°	659.3	695.5	516.8	285.0	301.9	280.1	519.2	693.1	637.6	591.7	521.7
65°	582.0	618.3	408.1	260.8	277.7	256.0	420.2	613.4	562.7	526.5	475.8
67.5°	499.9	533.7	323.6	236.7	248.8	234.3	338.1	533.7	487.8	463.7	415.4
70°	432.3	470.9	246.3	212.5	219.8	210.1	263.2	461.3	420.2	410.6	355.0
72.5°	364.7	396.1	190.8	188.4	186.0	183.5	193.2	393.7	355.0	338.1	275.3
75°	299.5	321.2	157.0	157.0	149.7	152.1	157.0	321.2	289.8	275.3	195.6
77.5°	236.7	253.6	128.0	123.2	115.9	115.9	125.6	246.3	229.4	212.5	130.4
80°	178.7	183.5	96.6	91.8	89.4	89.4	96.6	178.7	169.1	152.1	101.4
82.5°	120.8	101.4	65.2	67.6	65.2	65.2	62.8	103.8	113.5	77.3	74.9
85°	67.6	45.9	41.1	31.4	24.2	26.6	38.6	43.5	62.8	41.1	48.3
87.5°	24.2	19.3	7.2	9.7	7.2	7.2	7.2	19.3	19.3	14.5	7.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P845563

CATALOG NUMBER: SQ2R-PC3-125D-935-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2526.2	2526.2	2526.2	2526.2	2526.2	2526.2
2.5°	2518.9	2533.4	2531.0	2516.5	2547.9	2487.5
5°	2521.3	2550.3	2535.8	2521.3	2540.6	2480.3
7.5°	2509.2	2543.1	2526.2	2518.9	2538.2	2470.6
10°	2502.0	2531.0	2516.5	2506.8	2526.2	2456.1
12.5°	2494.8	2528.6	2509.2	2497.2	2509.2	2436.8
15°	2475.4	2511.7	2499.6	2480.3	2480.3	2410.2
17.5°	2460.9	2497.2	2485.1	2458.5	2446.5	2378.8
20°	2451.3	2485.1	2468.2	2429.5	2410.2	2337.8
22.5°	2429.5	2468.2	2441.6	2400.6	2374.0	2296.7
25°	2390.9	2405.4	2403.0	2366.8	2323.3	2248.4
27.5°	2289.5	2296.7	2304.0	2328.1	2279.8	2195.3
30°	2113.2	1994.8	2142.2	2250.8	2226.7	2137.3
32.5°	1779.9	1741.3	1828.2	2108.3	2156.6	2060.0
35°	1596.4	1550.5	1622.9	1934.5	2077.0	1985.2
37.5°	1429.7	1429.7	1449.0	1625.3	1987.6	1895.8
40°	1311.4	1275.2	1328.3	1424.9	1852.4	1789.6
42.5°	1120.6	1108.5	1142.3	1255.8	1647.1	1671.2
45°	987.8	973.3	1004.7	1113.3	1424.9	1543.2
47.5°	886.3	833.2	903.2	992.6	1207.5	1412.8
50°	792.1	736.6	804.2	881.5	1024.0	1287.2
52.5°	710.0	659.3	726.9	811.5	929.8	1149.6
55°	625.5	611.0	642.4	731.8	838.0	999.8
57.5°	555.5	560.3	565.1	661.7	753.5	857.3
60°	512.0	521.7	519.2	594.1	683.5	743.8
62.5°	468.5	473.4	473.4	533.7	615.8	659.3
65°	417.8	417.8	422.6	490.3	557.9	582.0
67.5°	362.3	352.6	369.5	432.3	495.1	499.9
70°	285.0	268.1	297.1	374.3	442.0	432.3
72.5°	205.3	214.9	210.1	294.6	379.2	364.7
75°	169.1	183.5	171.5	210.1	309.1	299.5
77.5°	142.5	154.6	142.5	135.2	248.8	236.7
80°	113.5	123.2	113.5	103.8	183.5	178.7
82.5°	82.1	84.5	82.1	77.3	120.8	120.8
85°	38.6	31.4	43.5	50.7	48.3	67.6
87.5°	7.2	7.2	7.2	9.7	26.6	24.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P845563

CATALOG NUMBER: SQ2R-PC3-125D-935-UNV-STD-W-4

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	23.11	24.60	23.47	24.91	25.22	20.61	22.10	20.97	22.41	22.72
	3H	24.75	26.08	25.13	26.41	26.77	22.09	23.42	22.47	23.75	24.12
	4H	25.35	26.59	25.75	26.94	27.32	22.54	23.79	22.94	24.14	24.52
	6H	25.78	26.93	26.19	27.30	27.69	22.93	24.08	23.35	24.45	24.84
	8H	25.90	27.00	26.33	27.39	27.79	23.05	24.15	23.48	24.54	24.94
	12H	25.97	27.02	26.40	27.40	27.83	23.09	24.14	23.52	24.52	24.95
4H	2H	23.38	24.62	23.78	24.97	25.35	21.42	22.67	21.82	23.02	23.40
	3H	25.27	26.31	25.68	26.71	27.11	23.07	24.10	23.48	24.50	24.90
	4H	26.02	26.95	26.45	27.36	27.80	23.57	24.50	24.01	24.92	25.36
	6H	26.61	27.41	27.06	27.85	28.32	24.05	24.85	24.51	25.30	25.76
	8H	26.78	27.53	27.24	27.98	28.45	24.20	24.95	24.66	25.39	25.86
	12H	26.88	27.55	27.36	28.03	28.50	24.26	24.93	24.74	25.41	25.88
8H	4H	26.09	26.84	26.55	27.29	27.75	23.88	24.64	24.35	25.08	25.55
	6H	26.78	27.40	27.27	27.89	28.37	24.43	25.05	24.93	25.55	26.02
	8H	27.01	27.57	27.53	28.08	28.57	24.64	25.19	25.15	25.70	26.19
	12H	27.16	27.65	27.67	28.15	28.71	24.75	25.24	25.26	25.73	26.30
12H	4H	26.07	26.74	26.56	27.22	27.69	23.92	24.59	24.40	25.07	25.54
	6H	26.76	27.32	27.27	27.83	28.32	24.48	25.04	25.00	25.55	26.04
	8H	27.04	27.53	27.55	28.02	28.59	24.73	25.22	25.24	25.71	26.28