

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: P845560

Luminaire Tested: SQ2R-PC3-125D-835-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845560
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-835-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS
1250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

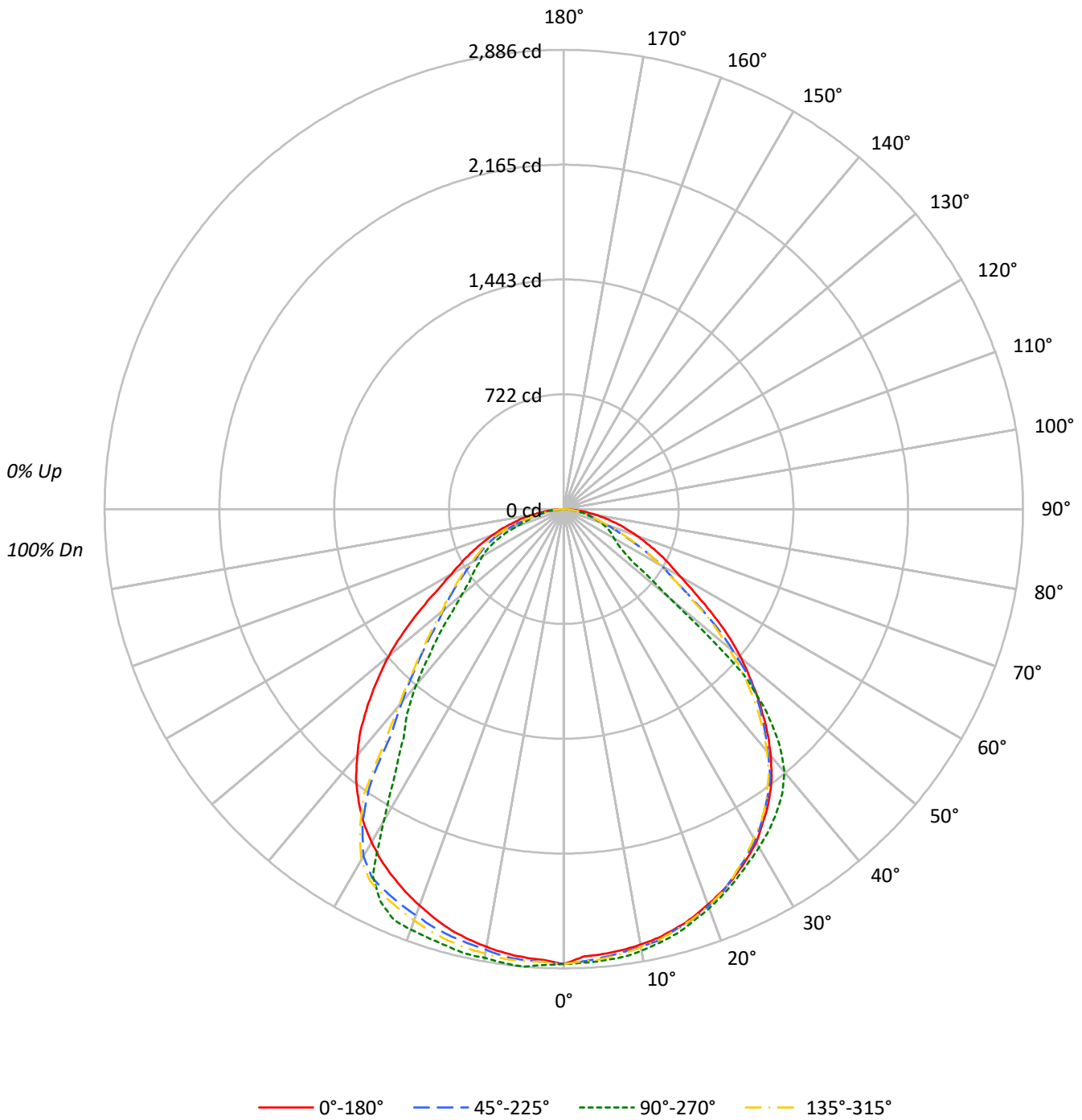
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6409.1 lumens
Efficiency: N/A
Efficacy: 130.3 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

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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	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87				
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				
3	93	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	65				
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	63	59	57				
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	56	52	50				
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44				
7	69	57	48	43	67	56	48	42	54	47	42	53	47	42	52	46	42	40				
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36				
9	60	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33				
10	57	44	37	32	56	44	37	32	43	36	32	42	36	31	41	35	31	30				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	46158	46158	46158	46158
5°	45491	46156	45846	46777
10°	45570	46198	45794	46958
15°	45593	46141	45775	47512
20°	45457	45879	45550	48321
25°	45330	45719	45378	48494
30°	45093	45757	45043	42088
35°	44281	45951	44281	34584
40°	42685	45507	42512	30414
45°	39877	41126	39751	25149
50°	36590	21692	36110	20939
55°	31851	12541	30773	19465
60°	27183	11738	26298	19062
65°	25165	12008	24329	18063
70°	23094	11740	22447	14323
75°	21142	10568	20462	12957
80°	18801	9400	17787	12961
85°	14172	5057	13171	6576

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 41126 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.1	4.2
10°-20°	783.1	12.2
20°-30°	1196.6	18.7
30°-40°	1352.4	21.1
40°-50°	1182.1	18.4
50°-60°	782.2	12.2
60°-70°	511.1	8.0
70°-80°	267.4	4.2
80°-90°	63.1	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°	2250.8	35.1
0°-40°	3603.2	56.2
0°-60°	5567.5	86.9
0°-90°	6409.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6409.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2859	2859	2859	2859	2859	
5°	2807	2848	2829	2886	2807	267
15°	2728	2760	2738	2842	2728	770
25°	2544	2566	2547	2722	2544	1173
35°	2247	2331	2247	1755	2247	1400
45°	1746	1801	1741	1101	1746	1345
55°	1132	446	1093	692	1132	1016
65°	659	314	637	473	659	652
75°	339	169	328	208	339	360
85°	76	27	71	36	76	93
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	2858.8	2858.8	2858.8	2858.8	2858.8	2858.8	2858.8	2858.8	2858.8	2858.8	2858.8
2.5°	2815.0	2886.1	2845.1	2842.4	2853.3	2856.0	2842.4	2872.4	2836.9	2875.2	2847.8
5°	2806.8	2877.9	2828.7	2823.2	2847.8	2839.6	2836.9	2864.2	2828.7	2858.8	2845.1
7.5°	2795.9	2861.5	2809.6	2806.8	2839.6	2828.7	2817.8	2850.6	2815.0	2847.8	2836.9
10°	2779.5	2836.9	2793.2	2795.9	2817.8	2806.8	2795.9	2823.2	2793.2	2834.2	2812.3
12.5°	2757.6	2815.0	2774.0	2765.8	2790.4	2771.3	2771.3	2793.2	2768.6	2812.3	2793.2
15°	2727.6	2785.0	2733.0	2738.5	2760.4	2741.2	2735.8	2763.1	2738.5	2782.2	2774.0
17.5°	2692.0	2741.2	2703.0	2705.7	2713.9	2705.7	2700.2	2722.1	2697.5	2744.0	2749.4
20°	2645.6	2703.0	2653.8	2653.8	2670.2	2648.3	2653.8	2672.9	2651.0	2705.7	2716.6
22.5°	2599.1	2653.8	2607.3	2607.3	2621.0	2590.9	2604.6	2618.2	2601.8	2662.0	2686.6
25°	2544.5	2588.2	2536.3	2552.7	2566.3	2539.0	2536.3	2558.1	2547.2	2607.3	2651.0
27.5°	2484.3	2522.6	2473.4	2495.3	2508.9	2489.8	2465.2	2492.5	2487.1	2555.4	2610.0
30°	2418.7	2454.3	2405.1	2435.1	2454.3	2426.9	2388.7	2413.3	2416.0	2495.3	2517.1
32.5°	2331.3	2366.8	2320.3	2369.5	2396.9	2358.6	2314.9	2328.5	2339.5	2418.7	2355.9
35°	2246.6	2263.0	2227.4	2290.3	2331.3	2284.8	2219.2	2235.6	2246.6	2336.7	2131.8
37.5°	2145.4	2145.4	2131.8	2200.1	2254.8	2186.4	2115.4	2123.6	2145.4	2222.0	1776.5
40°	2025.2	2008.8	1995.1	2085.3	2159.1	2068.9	1984.2	1986.9	2017.0	2036.1	1582.4
42.5°	1891.3	1872.1	1866.7	1962.3	2006.0	1932.3	1844.8	1847.5	1891.3	1779.2	1402.0
45°	1746.4	1738.2	1732.7	1798.3	1801.1	1754.6	1691.7	1705.4	1740.9	1536.0	1240.8
47.5°	1598.8	1593.4	1590.6	1538.7	1527.8	1495.0	1527.8	1557.8	1587.9	1281.8	1093.2
50°	1456.7	1418.4	1396.6	1205.3	863.6	1186.1	1344.7	1396.6	1437.6	1117.8	983.9
52.5°	1300.9	1268.1	1199.8	921.0	546.6	915.6	1177.9	1243.5	1268.1	1016.7	901.9
55°	1131.5	1131.5	983.9	590.3	445.5	620.4	967.5	1112.3	1093.2	910.1	809.0
57.5°	970.2	1003.0	817.2	396.3	393.6	396.3	811.7	989.4	934.7	825.4	732.5
60°	841.8	891.0	707.9	352.6	363.5	347.1	694.2	880.0	814.4	735.2	647.7
62.5°	746.1	787.1	584.9	322.5	341.6	317.0	587.6	784.4	721.5	669.6	590.3
65°	658.7	699.7	461.9	295.2	314.3	289.7	475.5	694.2	636.8	595.8	538.4
67.5°	565.7	604.0	366.2	267.8	281.5	265.1	382.6	604.0	552.1	524.7	470.1
70°	489.2	532.9	278.8	240.5	248.7	237.8	297.9	522.0	475.5	464.6	401.8
72.5°	412.7	448.2	215.9	213.2	210.4	207.7	218.6	445.5	401.8	382.6	311.6
75°	338.9	363.5	177.6	177.6	169.4	172.2	177.6	363.5	328.0	311.6	221.4
77.5°	267.8	287.0	144.9	139.4	131.2	131.2	142.1	278.8	259.6	240.5	147.6
80°	202.2	207.7	109.3	103.9	101.1	101.1	109.3	202.2	191.3	172.2	114.8
82.5°	136.7	114.8	73.8	76.5	73.8	73.8	71.1	117.5	128.5	87.5	84.7
85°	76.5	51.9	46.5	35.5	27.3	30.1	43.7	49.2	71.1	46.5	54.7
87.5°	27.3	21.9	8.2	10.9	8.2	8.2	8.2	21.9	21.9	16.4	8.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2858.8	2858.8	2858.8	2858.8	2858.8	2858.8
2.5°	2850.6	2867.0	2864.2	2847.8	2883.4	2815.0
5°	2853.3	2886.1	2869.7	2853.3	2875.2	2806.8
7.5°	2839.6	2877.9	2858.8	2850.6	2872.4	2795.9
10°	2831.4	2864.2	2847.8	2836.9	2858.8	2779.5
12.5°	2823.2	2861.5	2839.6	2826.0	2839.6	2757.6
15°	2801.4	2842.4	2828.7	2806.8	2806.8	2727.6
17.5°	2785.0	2826.0	2812.3	2782.2	2768.6	2692.0
20°	2774.0	2812.3	2793.2	2749.4	2727.6	2645.6
22.5°	2749.4	2793.2	2763.1	2716.6	2686.6	2599.1
25°	2705.7	2722.1	2719.4	2678.4	2629.2	2544.5
27.5°	2590.9	2599.1	2607.3	2634.6	2580.0	2484.3
30°	2391.4	2257.5	2424.2	2547.2	2519.9	2418.7
32.5°	2014.2	1970.5	2068.9	2385.9	2440.6	2331.3
35°	1806.5	1754.6	1836.6	2189.2	2350.4	2246.6
37.5°	1618.0	1618.0	1639.8	1839.3	2249.3	2145.4
40°	1484.0	1443.0	1503.2	1612.5	2096.2	2025.2
42.5°	1268.1	1254.5	1292.7	1421.2	1863.9	1891.3
45°	1117.8	1101.4	1136.9	1259.9	1612.5	1746.4
47.5°	1003.0	942.9	1022.2	1123.3	1366.5	1598.8
50°	896.4	833.6	910.1	997.6	1158.8	1456.7
52.5°	803.5	746.1	822.6	918.3	1052.2	1300.9
55°	707.9	691.5	727.0	828.1	948.4	1131.5
57.5°	628.6	634.1	639.5	748.9	852.7	970.2
60°	579.4	590.3	587.6	672.3	773.4	841.8
62.5°	530.2	535.7	535.7	604.0	696.9	746.1
65°	472.8	472.8	478.3	554.8	631.3	658.7
67.5°	410.0	399.0	418.2	489.2	560.3	565.7
70°	322.5	303.4	336.2	423.6	500.1	489.2
72.5°	232.3	243.2	237.8	333.4	429.1	412.7
75°	191.3	207.7	194.0	237.8	349.8	338.9
77.5°	161.2	174.9	161.2	153.0	281.5	267.8
80°	128.5	139.4	128.5	117.5	207.7	202.2
82.5°	92.9	95.7	92.9	87.5	136.7	136.7
85°	43.7	35.5	49.2	57.4	54.7	76.5
87.5°	8.2	8.2	8.2	10.9	30.1	27.3
90°	0.0	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	23.54	25.03	23.90	25.34	25.65	21.04	22.53	21.40	22.84	23.15
	3H	25.18	26.51	25.56	26.84	27.20	22.52	23.85	22.90	24.18	24.54
	4H	25.78	27.02	26.18	27.37	27.75	22.97	24.22	23.37	24.57	24.95
	6H	26.21	27.36	26.62	27.73	28.12	23.36	24.51	23.78	24.88	25.27
	8H	26.33	27.43	26.76	27.82	28.22	23.48	24.58	23.91	24.97	25.37
	12H	26.40	27.45	26.83	27.83	28.26	23.52	24.57	23.95	24.95	25.38
4H	2H	23.81	25.05	24.21	25.40	25.78	21.85	23.10	22.25	23.45	23.83
	3H	25.70	26.73	26.11	27.14	27.54	23.50	24.53	23.91	24.93	25.33
	4H	26.45	27.38	26.88	27.79	28.23	24.00	24.93	24.44	25.35	25.79
	6H	27.04	27.84	27.49	28.28	28.75	24.48	25.28	24.94	25.73	26.19
	8H	27.21	27.96	27.67	28.41	28.87	24.63	25.38	25.09	25.82	26.29
	12H	27.31	27.98	27.79	28.46	28.93	24.69	25.36	25.17	25.84	26.31
8H	4H	26.52	27.27	26.98	27.71	28.18	24.31	25.07	24.78	25.51	25.98
	6H	27.21	27.83	27.70	28.32	28.80	24.86	25.48	25.36	25.98	26.45
	8H	27.44	28.00	27.96	28.51	29.00	25.07	25.62	25.58	26.13	26.62
	12H	27.59	28.08	28.10	28.58	29.14	25.18	25.67	25.69	26.16	26.73
12H	4H	26.50	27.17	26.99	27.65	28.12	24.35	25.02	24.83	25.50	25.97
	6H	27.19	27.75	27.70	28.26	28.75	24.91	25.47	25.42	25.98	26.47
	8H	27.47	27.96	27.98	28.45	29.02	25.16	25.65	25.67	26.14	26.71