

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: P845607

Luminaire Tested: SQ2R-PP3-125D-830-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845607
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-830-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS
1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

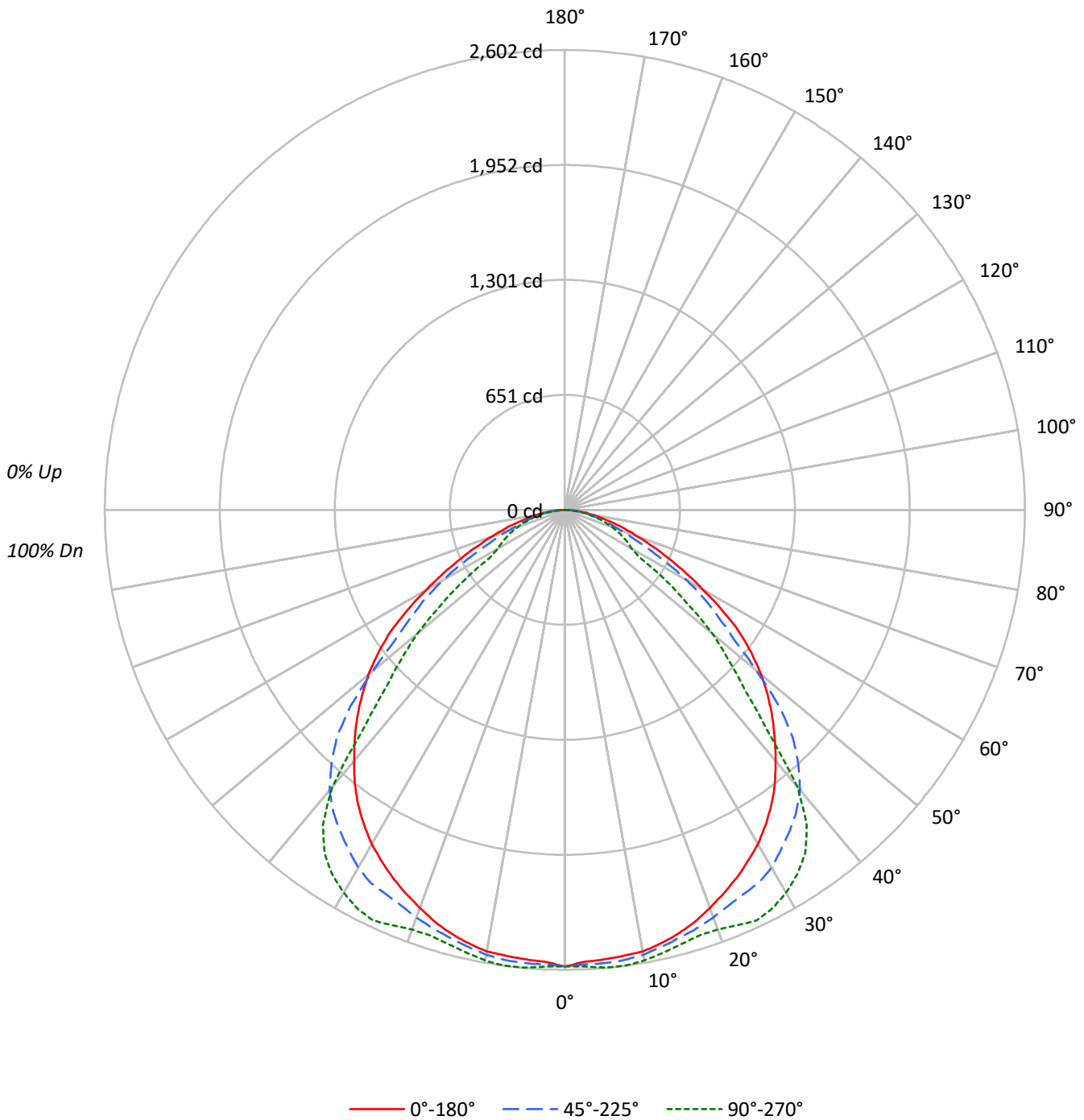
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6506.6 lumens
Efficiency: N/A
Efficacy: 132.2 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				
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	89	87				
2	101	94	88	82	99	92	86	82	88	84	80	85	81	78	82	79	76	74				
3	93	83	76	70	91	82	75	69	79	73	68	76	71	67	74	69	66	64				
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	61	57	55				
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49				
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43				
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38				
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34				
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31				
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	41706	41706	41706
5°	41379	41733	42131
10°	41589	41902	42440
15°	41489	41901	42539
20°	41192	42178	43398
25°	40958	42710	45678
30°	40727	43578	46631
35°	40150	43702	46716
40°	39079	43625	43163
45°	37908	41649	32858
50°	36419	35528	27367
55°	33898	29900	19676
60°	29185	25659	14108
65°	24619	19820	13876
70°	20497	15597	13275
75°	17374	13456	12433
80°	14728	11678	11167
85°	11634	9615	6076

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 41649 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.1	3.8
10°-20°	712.0	10.9
20°-30°	1115.9	17.2
30°-40°	1377.9	21.2
40°-50°	1297.2	19.9
50°-60°	917.0	14.1
60°-70°	521.0	8.0
70°-80°	258.0	4.0
80°-90°	61.5	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°	2074.0	31.9
0°-40°	3451.9	53.1
0°-60°	5666.1	87.1
0°-90°	6506.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6506.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2583	2583	2583	2583	2583	
5°	2553	2600	2575	2580	2600	243
15°	2482	2518	2507	2531	2545	700
25°	2299	2359	2397	2493	2564	1059
35°	2037	2094	2217	2343	2370	1272
45°	1660	1788	1824	1548	1439	1279
55°	1204	1278	1062	803	699	1064
65°	644	680	519	366	363	646
75°	278	309	216	202	199	300
85°	63	57	52	41	33	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2583.1	2583.1	2583.1	2583.1	2583.1
2.5°	2558.5	2605.0	2574.9	2580.4	2585.8
5°	2553.1	2599.5	2574.9	2580.4	2599.5
7.5°	2544.9	2594.0	2569.5	2577.7	2602.2
10°	2536.7	2577.7	2555.8	2569.5	2588.6
12.5°	2512.1	2550.3	2531.2	2550.3	2566.7
15°	2482.1	2517.6	2506.7	2531.2	2544.9
17.5°	2443.9	2484.8	2482.1	2514.9	2525.8
20°	2397.4	2449.3	2454.8	2498.5	2525.8
22.5°	2348.3	2411.1	2422.0	2493.0	2544.9
25°	2299.1	2359.2	2397.4	2493.0	2564.0
27.5°	2241.8	2301.9	2378.3	2484.8	2542.2
30°	2184.5	2241.8	2337.4	2449.3	2501.2
32.5°	2113.5	2173.5	2277.3	2400.2	2446.6
35°	2037.0	2094.3	2217.2	2342.8	2370.1
37.5°	1952.4	2012.4	2151.7	2236.3	2247.3
40°	1854.1	1938.7	2069.8	2083.4	2047.9
42.5°	1758.5	1873.2	1955.1	1884.1	1695.7
45°	1660.2	1788.5	1824.0	1548.2	1439.0
47.5°	1556.4	1684.8	1643.8	1332.5	1256.1
50°	1449.9	1570.1	1414.4	1160.5	1089.5
52.5°	1329.8	1433.5	1209.6	996.7	879.2
55°	1204.2	1277.9	1062.2	802.8	699.0
57.5°	1054.0	1108.6	936.6	630.8	499.7
60°	903.8	944.8	794.6	494.2	436.9
62.5°	767.3	802.8	647.1	412.3	401.4
65°	644.4	679.9	518.8	365.9	363.2
67.5°	532.5	570.7	415.0	327.7	324.9
70°	434.2	475.1	330.4	286.7	281.2
72.5°	352.2	390.5	267.6	243.0	240.3
75°	278.5	308.6	215.7	202.1	199.3
77.5°	213.0	234.8	169.3	161.1	158.4
80°	158.4	166.6	125.6	122.9	120.1
82.5°	109.2	103.8	87.4	84.6	79.2
85°	62.8	57.3	51.9	41.0	32.8
87.5°	24.6	24.6	10.9	8.2	8.2
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	24.41	25.93	24.77	26.24	26.56	20.81	22.33	21.18	22.65	22.96
	3H	25.55	26.92	25.93	27.24	27.61	21.96	23.32	22.34	23.65	24.01
	4H	25.93	27.20	26.33	27.55	27.93	22.45	23.73	22.85	24.08	24.46
	6H	26.17	27.35	26.59	27.72	28.11	22.83	24.01	23.24	24.37	24.77
	8H	26.24	27.36	26.67	27.75	28.15	22.93	24.05	23.36	24.44	24.85
	12H	26.27	27.35	26.70	27.73	28.16	22.97	24.04	23.40	24.42	24.85
4H	2H	24.60	25.87	25.00	26.22	26.60	21.60	22.88	22.00	23.23	23.61
	3H	25.97	27.02	26.38	27.42	27.82	22.91	23.96	23.32	24.36	24.76
	4H	26.47	27.41	26.90	27.83	28.27	23.49	24.44	23.92	24.85	25.29
	6H	26.84	27.66	27.29	28.10	28.56	23.96	24.78	24.42	25.23	25.69
	8H	26.94	27.71	27.41	28.15	28.62	24.10	24.86	24.56	25.31	25.77
	12H	27.01	27.69	27.49	28.17	28.64	24.15	24.84	24.63	25.32	25.79
8H	4H	26.53	27.30	26.99	27.74	28.21	23.81	24.58	24.27	25.02	25.49
	6H	26.98	27.62	27.48	28.11	28.59	24.37	25.01	24.87	25.50	25.98
	8H	27.14	27.71	27.65	28.22	28.71	24.56	25.13	25.07	25.64	26.13
	12H	27.25	27.76	27.76	28.25	28.82	24.66	25.17	25.17	25.66	26.22
12H	4H	26.52	27.20	27.00	27.68	28.15	23.84	24.53	24.33	25.01	25.48
	6H	26.97	27.54	27.48	28.05	28.54	24.43	25.00	24.94	25.51	26.00
	8H	27.17	27.67	27.68	28.17	28.73	24.66	25.17	25.17	25.66	26.23