

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: P845608

Luminaire Tested: SQ2R-PP3-125D-835-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845608
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-835-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS
1250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

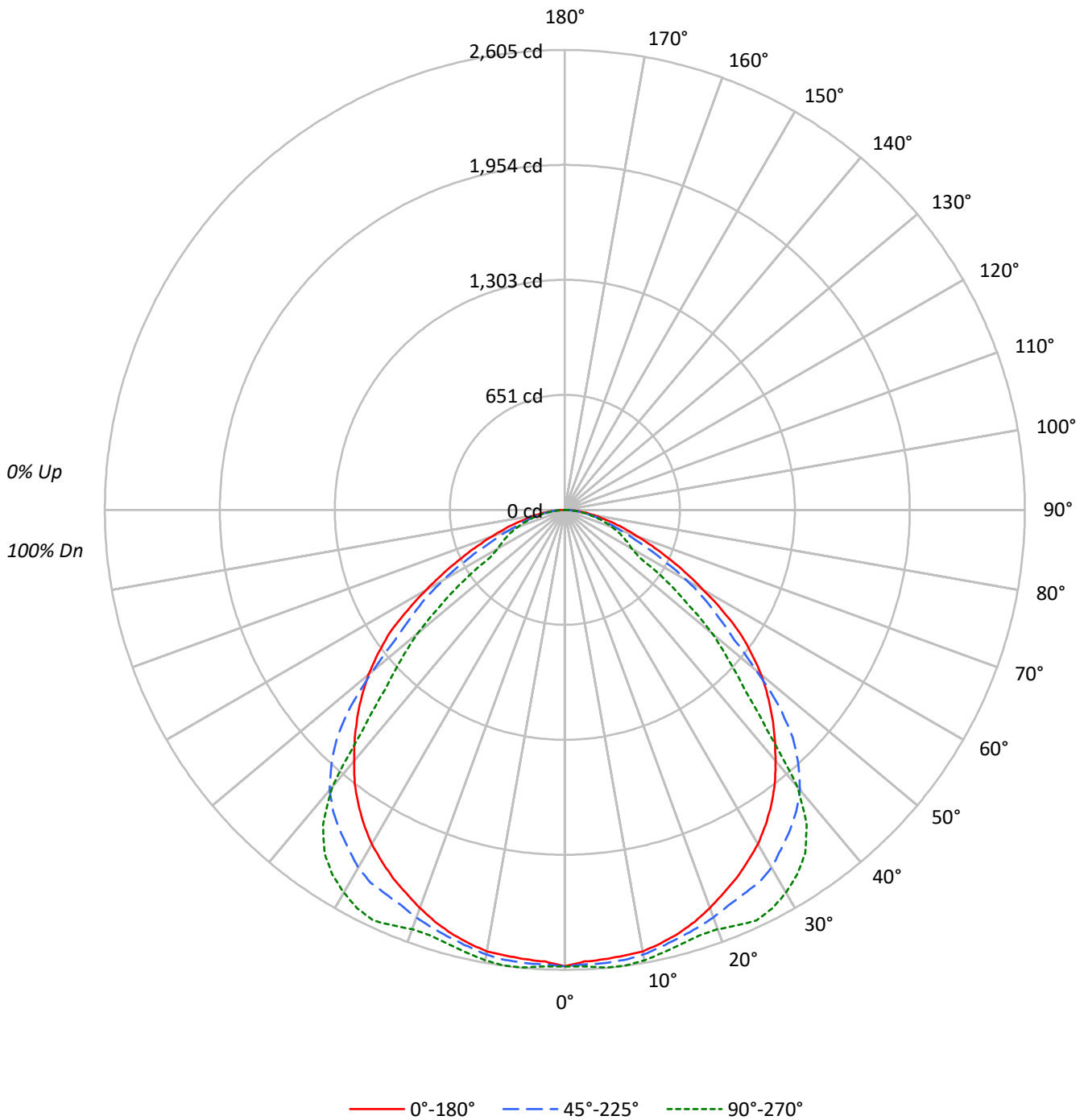
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6512.5 lumens
Efficiency: N/A
Efficacy: 132.4 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°	41743	41743	41743
5°	41417	41770	42169
10°	41627	41940	42478
15°	41526	41937	42577
20°	41230	42216	43438
25°	40996	42749	45719
30°	40762	43617	46674
35°	40186	43741	46759
40°	39112	43663	43203
45°	37943	41687	32887
50°	36452	35560	27392
55°	33928	29926	19696
60°	29211	25682	14121
65°	24642	19839	13887
70°	20516	15611	13289
75°	17392	13468	12445
80°	14737	11688	11186
85°	11652	9615	6076

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 41687 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.3	3.8
10°-20°	712.7	10.9
20°-30°	1116.9	17.2
30°-40°	1379.2	21.2
40°-50°	1298.4	19.9
50°-60°	917.8	14.1
60°-70°	521.4	8.0
70°-80°	258.2	4.0
80°-90°	61.6	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°	2075.9	31.9
0°-40°	3455.0	53.1
0°-60°	5671.2	87.1
0°-90°	6512.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6512.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2585	2585	2585	2585	2585	
5°	2555	2602	2577	2583	2602	243
15°	2484	2520	2509	2534	2547	701
25°	2301	2361	2400	2495	2566	1060
35°	2039	2096	2219	2345	2372	1273
45°	1662	1790	1826	1550	1440	1280
55°	1205	1279	1063	804	700	1065
65°	645	680	519	366	364	646
75°	279	309	216	202	200	301
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°	2585.4	2585.4	2585.4	2585.4	2585.4
2.5°	2560.8	2607.3	2577.2	2582.7	2588.2
5°	2555.4	2601.8	2577.2	2582.7	2601.8
7.5°	2547.2	2596.4	2571.8	2580.0	2604.6
10°	2539.0	2580.0	2558.1	2571.8	2590.9
12.5°	2514.4	2552.7	2533.5	2552.7	2569.0
15°	2484.3	2519.9	2508.9	2533.5	2547.2
17.5°	2446.1	2487.1	2484.3	2517.1	2528.1
20°	2399.6	2451.5	2457.0	2500.7	2528.1
22.5°	2350.4	2413.3	2424.2	2495.3	2547.2
25°	2301.2	2361.3	2399.6	2495.3	2566.3
27.5°	2243.8	2303.9	2380.5	2487.1	2544.5
30°	2186.4	2243.8	2339.5	2451.5	2503.5
32.5°	2115.4	2175.5	2279.3	2402.3	2448.8
35°	2038.8	2096.2	2219.2	2344.9	2372.3
37.5°	1954.1	2014.2	2153.6	2238.4	2249.3
40°	1855.7	1940.5	2071.6	2085.3	2049.8
42.5°	1760.1	1874.9	1956.8	1885.8	1697.2
45°	1661.7	1790.1	1825.7	1549.6	1440.3
47.5°	1557.8	1686.3	1645.3	1333.7	1257.2
50°	1451.2	1571.5	1415.7	1161.5	1090.5
52.5°	1331.0	1434.8	1210.7	997.6	880.0
55°	1205.3	1279.1	1063.1	803.5	699.7
57.5°	1054.9	1109.6	937.4	631.3	500.1
60°	904.6	945.6	795.3	494.7	437.3
62.5°	768.0	803.5	647.7	412.7	401.8
65°	645.0	680.5	519.3	366.2	363.5
67.5°	532.9	571.2	415.4	328.0	325.2
70°	434.6	475.5	330.7	287.0	281.5
72.5°	352.6	390.8	267.8	243.2	240.5
75°	278.8	308.8	215.9	202.2	199.5
77.5°	213.2	235.0	169.4	161.2	158.5
80°	158.5	166.7	125.7	123.0	120.3
82.5°	109.3	103.9	87.5	84.7	79.3
85°	62.9	57.4	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	24.78	26.25	26.56	20.82	22.34	21.18	22.65	22.97
	3H	25.56	26.92	25.94	27.25	27.61	21.97	23.33	22.34	23.66	24.02
	4H	25.93	27.20	26.33	27.55	27.93	22.46	23.73	22.86	24.08	24.46
	6H	26.18	27.35	26.59	27.72	28.11	22.83	24.01	23.25	24.38	24.77
	8H	26.24	27.36	26.67	27.75	28.15	22.94	24.06	23.36	24.45	24.85
	12H	26.28	27.35	26.71	27.73	28.16	22.97	24.04	23.40	24.43	24.86
4H	2H	24.60	25.87	25.00	26.22	26.60	21.61	22.88	22.01	23.23	23.61
	3H	25.97	27.02	26.38	27.42	27.82	22.91	23.97	23.32	24.37	24.77
	4H	26.47	27.41	26.90	27.83	28.27	23.49	24.44	23.93	24.85	25.29
	6H	26.84	27.66	27.30	28.10	28.56	23.97	24.79	24.42	25.23	25.69
	8H	26.94	27.71	27.41	28.16	28.62	24.10	24.87	24.56	25.31	25.78
	12H	27.01	27.69	27.49	28.17	28.64	24.16	24.84	24.64	25.32	25.79
8H	4H	26.53	27.30	27.00	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	24.38	25.01	24.87	25.50	25.98
	8H	27.14	27.71	27.66	28.22	28.71	24.56	25.13	25.08	25.64	26.13
	12H	27.25	27.76	27.76	28.25	28.82	24.66	25.17	25.17	25.66	26.23
12H	4H	26.52	27.20	27.00	27.68	28.15	23.85	24.53	24.33	25.01	25.48
	6H	26.97	27.55	27.49	28.06	28.54	24.43	25.00	24.94	25.51	26.00
	8H	27.17	27.68	27.68	28.17	28.73	24.67	25.17	25.18	25.66	26.23