

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: P845609

Luminaire Tested: SQ2R-PP3-125D-840-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845609
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-840-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS
1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

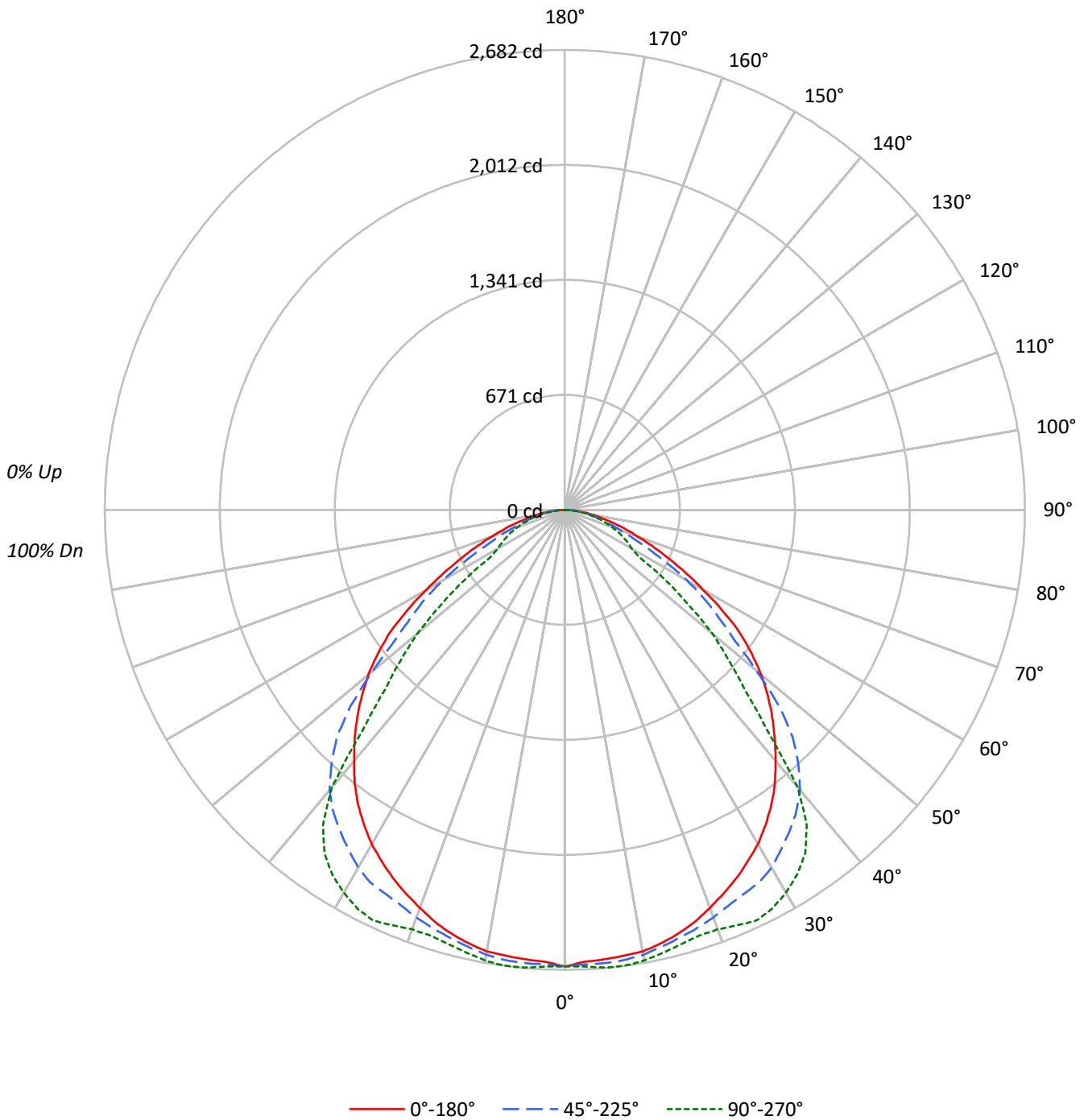
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6706.6 lumens
Efficiency: N/A
Efficacy: 136.3 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	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°	42988	42988	42988
5°	42652	43016	43426
10°	42868	43191	43745
15°	42765	43188	43846
20°	42459	43474	44732
25°	42218	44023	47081
30°	41978	44916	48065
35°	41384	45046	48153
40°	40280	44965	44491
45°	39073	42930	33867
50°	37540	36620	28208
55°	34939	30818	20282
60°	30083	26447	14541
65°	25375	20432	14300
70°	21125	16079	13685
75°	17910	13868	12820
80°	15174	12041	11511
85°	11986	9911	6262

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 42930 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.6	3.8
10°-20°	733.9	10.9
20°-30°	1150.2	17.2
30°-40°	1420.3	21.2
40°-50°	1337.1	19.9
50°-60°	945.2	14.1
60°-70°	537.0	8.0
70°-80°	266.0	4.0
80°-90°	63.4	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°	2137.7	31.9
0°-40°	3558.0	53.1
0°-60°	5840.3	87.1
0°-90°	6706.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6706.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2662	2662	2662	2662	2662	
5°	2632	2679	2654	2660	2679	251
15°	2558	2595	2584	2609	2623	721
25°	2370	2432	2471	2570	2643	1092
35°	2100	2159	2285	2415	2443	1311
45°	1711	1844	1880	1596	1483	1318
55°	1241	1317	1095	828	720	1097
65°	664	701	535	377	374	665
75°	287	318	222	208	206	310
85°	65	59	54	42	34	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2662.5	2662.5	2662.5	2662.5	2662.5
2.5°	2637.2	2685.0	2654.1	2659.7	2665.3
5°	2631.6	2679.4	2654.1	2659.7	2679.4
7.5°	2623.1	2673.8	2648.5	2656.9	2682.2
10°	2614.7	2656.9	2634.4	2648.5	2668.2
12.5°	2589.3	2628.8	2609.0	2628.8	2645.6
15°	2558.4	2595.0	2583.7	2609.0	2623.1
17.5°	2519.0	2561.2	2558.4	2592.2	2603.4
20°	2471.1	2524.6	2530.2	2575.3	2603.4
22.5°	2420.5	2485.2	2496.5	2569.6	2623.1
25°	2369.8	2431.7	2471.1	2569.6	2642.8
27.5°	2310.7	2372.6	2451.4	2561.2	2620.3
30°	2251.6	2310.7	2409.2	2524.6	2578.1
32.5°	2178.4	2240.3	2347.3	2474.0	2521.8
35°	2099.6	2158.7	2285.4	2414.8	2443.0
37.5°	2012.4	2074.3	2217.8	2305.1	2316.3
40°	1911.1	1998.3	2133.4	2147.5	2110.9
42.5°	1812.5	1930.8	2015.2	1942.0	1747.8
45°	1711.2	1843.5	1880.1	1595.8	1483.2
47.5°	1604.3	1736.6	1694.3	1373.5	1294.7
50°	1494.5	1618.3	1457.9	1196.2	1123.0
52.5°	1370.7	1477.6	1246.8	1027.3	906.3
55°	1241.2	1317.2	1094.8	827.5	720.5
57.5°	1086.4	1142.7	965.4	650.2	515.1
60°	931.6	973.8	819.0	509.4	450.3
62.5°	790.9	827.5	667.0	425.0	413.7
65°	664.2	700.8	534.8	377.1	374.3
67.5°	548.8	588.2	427.8	337.7	334.9
70°	447.5	489.7	340.6	295.5	289.9
72.5°	363.1	402.5	275.8	250.5	247.7
75°	287.1	318.0	222.3	208.3	205.5
77.5°	219.5	242.0	174.5	166.1	163.2
80°	163.2	171.7	129.5	126.7	123.8
82.5°	112.6	107.0	90.1	87.2	81.6
85°	64.7	59.1	53.5	42.2	33.8
87.5°	25.3	25.3	11.3	8.4	8.4
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	24.51	26.04	24.88	26.35	26.66	20.92	22.44	21.28	22.75	23.07
	3H	25.66	27.02	26.04	27.35	27.71	22.07	23.43	22.45	23.76	24.12
	4H	26.03	27.31	26.43	27.66	28.03	22.56	23.83	22.96	24.18	24.56
	6H	26.28	27.46	26.69	27.82	28.21	22.94	24.11	23.35	24.48	24.87
	8H	26.35	27.47	26.77	27.85	28.26	23.04	24.16	23.47	24.55	24.95
	12H	26.38	27.45	26.81	27.83	28.26	23.07	24.15	23.50	24.53	24.96
4H	2H	24.70	25.98	25.10	26.33	26.70	21.71	22.98	22.11	23.33	23.71
	3H	26.07	27.12	26.48	27.52	27.93	23.02	24.07	23.43	24.47	24.87
	4H	26.57	27.52	27.00	27.93	28.37	23.59	24.54	24.03	24.96	25.40
	6H	26.94	27.76	27.40	28.21	28.67	24.07	24.89	24.53	25.33	25.79
	8H	27.05	27.81	27.51	28.26	28.73	24.20	24.97	24.66	25.41	25.88
	12H	27.11	27.80	27.59	28.28	28.75	24.26	24.94	24.74	25.42	25.89
8H	4H	26.63	27.40	27.10	27.85	28.31	23.91	24.68	24.38	25.12	25.59
	6H	27.09	27.72	27.58	28.21	28.69	24.48	25.11	24.98	25.61	26.08
	8H	27.24	27.81	27.76	28.32	28.81	24.67	25.24	25.18	25.75	26.24
	12H	27.36	27.86	27.87	28.36	28.92	24.77	25.27	25.28	25.77	26.33
12H	4H	26.62	27.31	27.10	27.79	28.26	23.95	24.64	24.43	25.11	25.59
	6H	27.08	27.65	27.59	28.16	28.65	24.53	25.10	25.05	25.61	26.10
	8H	27.27	27.78	27.78	28.27	28.84	24.77	25.27	25.28	25.77	26.33