

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: P845595

Luminaire Tested: SQ2R-PP3-075D-830-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845595
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-PP3-075D-830-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS
750 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

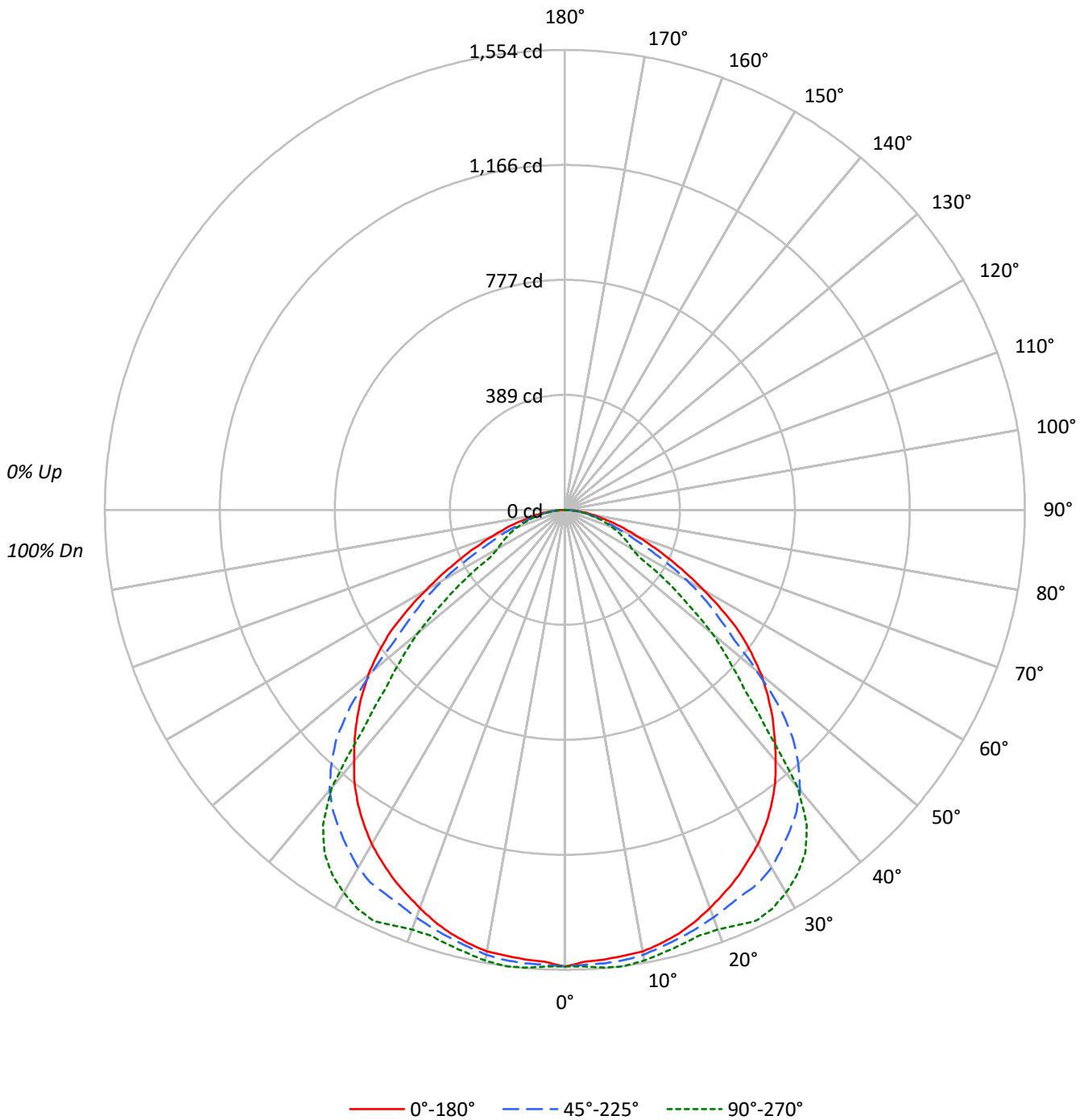
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3886.6 lumens
Efficiency: N/A
Efficacy: 145.6 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): 26.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
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°	24913	24913	24913
5°	24716	24929	25167
10°	24842	25030	25350
15°	24782	25028	25409
20°	24606	25194	25923
25°	24465	25513	27284
30°	24326	26030	27854
35°	23984	26104	27904
40°	23343	26057	25783
45°	22644	24877	19628
50°	21755	21223	16347
55°	20248	17861	11752
60°	17434	15326	8428
65°	14705	11840	8287
70°	12241	9319	7931
75°	10380	8041	7430
80°	8796	6974	6676
85°	6947	5743	3631

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 24877 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.0	3.8
10°-20°	425.3	10.9
20°-30°	666.6	17.2
30°-40°	823.1	21.2
40°-50°	774.8	19.9
50°-60°	547.7	14.1
60°-70°	311.2	8.0
70°-80°	154.1	4.0
80°-90°	36.8	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°	1238.8	31.9
0°-40°	2061.9	53.1
0°-60°	3384.5	87.1
0°-90°	3886.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3886.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1543	1543	1543	1543	1543	
5°	1525	1553	1538	1541	1553	145
15°	1483	1504	1497	1512	1520	418
25°	1373	1409	1432	1489	1532	633
35°	1217	1251	1324	1399	1416	760
45°	992	1068	1090	925	860	764
55°	719	763	634	480	418	636
65°	385	406	310	219	217	386
75°	166	184	129	121	119	179
85°	38	34	31	24	20	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1543.0	1543.0	1543.0	1543.0	1543.0
2.5°	1528.3	1556.0	1538.1	1541.3	1544.6
5°	1525.0	1552.8	1538.1	1541.3	1552.8
7.5°	1520.1	1549.5	1534.8	1539.7	1554.4
10°	1515.2	1539.7	1526.7	1534.8	1546.2
12.5°	1500.6	1523.4	1512.0	1523.4	1533.2
15°	1482.6	1503.8	1497.3	1512.0	1520.1
17.5°	1459.8	1484.2	1482.6	1502.2	1508.7
20°	1432.1	1463.0	1466.3	1492.4	1508.7
22.5°	1402.7	1440.2	1446.7	1489.1	1520.1
25°	1373.3	1409.2	1432.1	1489.1	1531.5
27.5°	1339.1	1375.0	1420.6	1484.2	1518.5
30°	1304.8	1339.1	1396.2	1463.0	1494.0
32.5°	1262.4	1298.3	1360.3	1433.7	1461.4
35°	1216.8	1251.0	1324.4	1399.4	1415.7
37.5°	1166.2	1202.1	1285.3	1335.8	1342.3
40°	1107.5	1158.0	1236.3	1244.5	1223.3
42.5°	1050.4	1118.9	1167.8	1125.4	1012.9
45°	991.7	1068.3	1089.5	924.8	859.6
47.5°	929.7	1006.4	981.9	795.9	750.3
50°	866.1	937.8	844.9	693.2	650.8
52.5°	794.3	856.3	722.6	595.3	525.2
55°	719.3	763.3	634.5	479.5	417.5
57.5°	629.6	662.2	559.4	376.8	298.5
60°	539.9	564.3	474.6	295.2	261.0
62.5°	458.3	479.5	386.6	246.3	239.8
65°	384.9	406.1	309.9	218.6	216.9
67.5°	318.1	340.9	247.9	195.7	194.1
70°	259.3	283.8	197.4	171.3	168.0
72.5°	210.4	233.2	159.8	145.2	143.5
75°	166.4	184.3	128.9	120.7	119.1
77.5°	127.2	140.3	101.1	96.2	94.6
80°	94.6	99.5	75.0	73.4	71.8
82.5°	65.2	62.0	52.2	50.6	47.3
85°	37.5	34.3	31.0	24.5	19.6
87.5°	14.7	14.7	6.5	4.9	4.9
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	22.62	24.14	22.98	24.45	24.77	19.02	20.54	19.39	20.86	21.17
	3H	23.76	25.13	24.14	25.45	25.81	20.17	21.53	20.55	21.86	22.22
	4H	24.14	25.41	24.54	25.76	26.14	20.66	21.94	21.06	22.29	22.67
	6H	24.38	25.56	24.79	25.93	26.32	21.04	22.22	21.45	22.58	22.98
	8H	24.45	25.57	24.88	25.96	26.36	21.14	22.26	21.57	22.65	23.06
	12H	24.48	25.56	24.91	25.94	26.37	21.18	22.25	21.61	22.63	23.06
4H	2H	22.81	24.08	23.21	24.43	24.81	19.81	21.09	20.21	21.44	21.81
	3H	24.18	25.23	24.59	25.63	26.03	21.12	22.17	21.53	22.57	22.97
	4H	24.67	25.62	25.11	26.04	26.48	21.70	22.65	22.13	23.06	23.50
	6H	25.05	25.87	25.50	26.31	26.77	22.17	22.99	22.63	23.44	23.90
	8H	25.15	25.92	25.61	26.36	26.83	22.31	23.07	22.77	23.52	23.99
	12H	25.22	25.90	25.70	26.38	26.85	22.36	23.05	22.85	23.53	24.00
8H	4H	24.74	25.51	25.20	25.95	26.42	22.02	22.79	22.48	23.23	23.70
	6H	25.19	25.83	25.69	26.32	26.80	22.58	23.22	23.08	23.71	24.19
	8H	25.35	25.92	25.86	26.43	26.92	22.77	23.34	23.29	23.85	24.34
	12H	25.46	25.97	25.97	26.46	27.02	22.87	23.38	23.38	23.87	24.44
12H	4H	24.73	25.41	25.21	25.89	26.36	22.05	22.74	22.54	23.22	23.69
	6H	25.18	25.75	25.69	26.26	26.75	22.64	23.21	23.15	23.72	24.21
	8H	25.38	25.88	25.89	26.38	26.94	22.87	23.38	23.38	23.87	24.44