

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: P845597

Luminaire Tested: SQ2R-PP3-075D-840-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845597
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-840-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS
750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

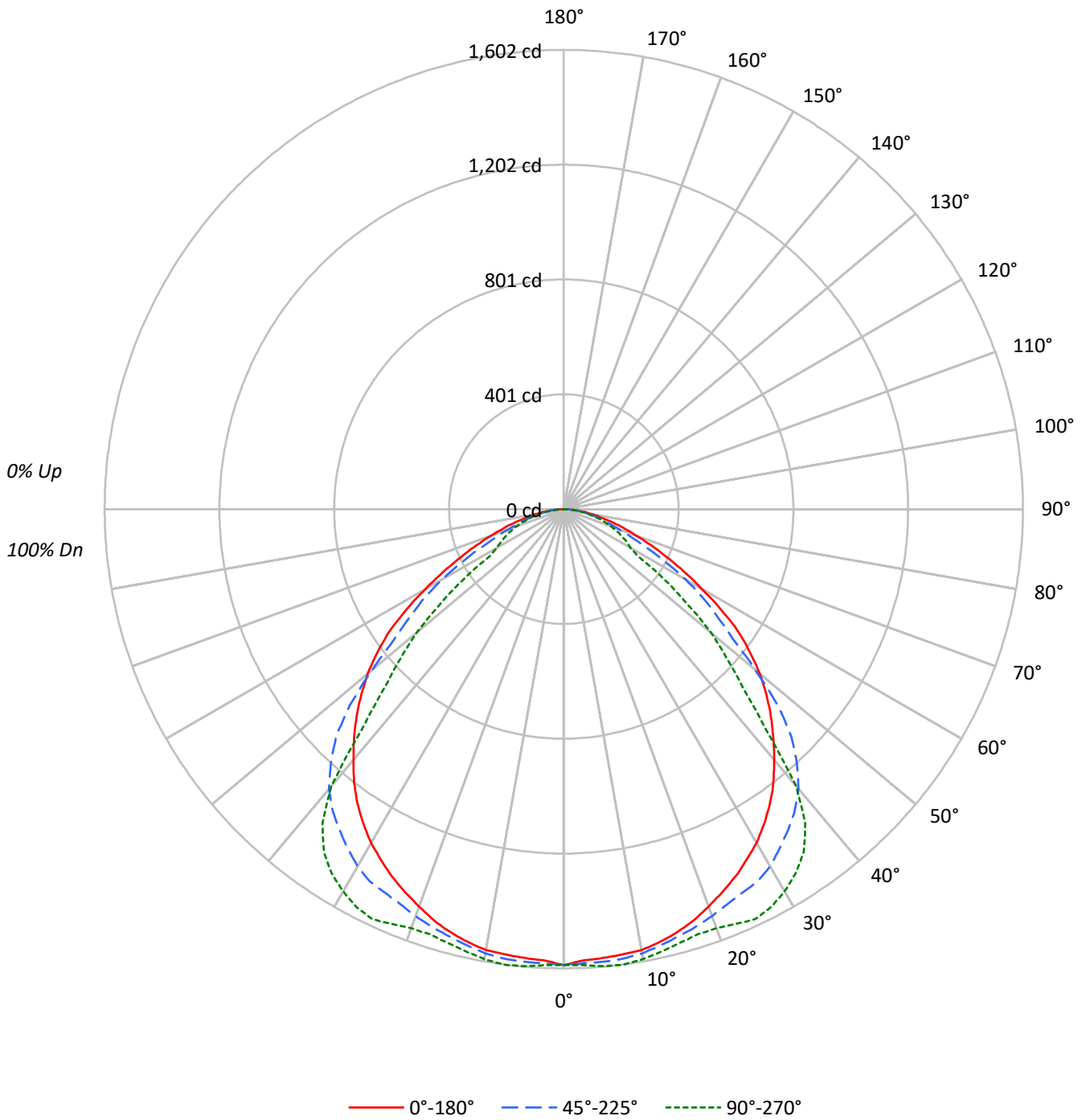
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4006.1 lumens
Efficiency: N/A
Efficacy: 150.0 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°	25678	25678	25678
5°	25477	25695	25940
10°	25606	25799	26130
15°	25544	25797	26191
20°	25362	25969	26720
25°	25219	26297	28123
30°	25074	26830	28711
35°	24721	26907	28763
40°	24059	26858	26576
45°	23341	25642	20231
50°	22423	21876	16849
55°	20870	18410	12116
60°	17970	15797	8686
65°	15159	12202	8542
70°	12619	9602	8176
75°	10699	8284	7654
80°	9066	7187	6881
85°	7169	5910	3742

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 25642 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.5	3.8
10°-20°	438.4	10.9
20°-30°	687.1	17.2
30°-40°	848.4	21.2
40°-50°	798.7	19.9
50°-60°	564.6	14.1
60°-70°	320.7	8.0
70°-80°	158.9	4.0
80°-90°	37.9	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°	1276.9	31.9
0°-40°	2125.3	53.1
0°-60°	3488.6	87.1
0°-90°	4006.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4006.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1590	1590	1590	1590	1590	
5°	1572	1600	1585	1589	1600	150
15°	1528	1550	1543	1558	1567	431
25°	1416	1452	1476	1535	1579	652
35°	1254	1290	1365	1442	1459	783
45°	1022	1101	1123	953	886	787
55°	741	787	654	494	430	655
65°	397	419	319	225	224	397
75°	172	190	133	124	123	185
85°	39	35	32	25	20	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1590.4	1590.4	1590.4	1590.4	1590.4
2.5°	1575.3	1603.8	1585.4	1588.7	1592.1
5°	1571.9	1600.5	1585.4	1588.7	1600.5
7.5°	1566.9	1597.1	1582.0	1587.0	1602.2
10°	1561.8	1587.0	1573.6	1582.0	1593.8
12.5°	1546.7	1570.2	1558.5	1570.2	1580.3
15°	1528.2	1550.1	1543.3	1558.5	1566.9
17.5°	1504.7	1529.9	1528.2	1548.4	1555.1
20°	1476.1	1508.0	1511.4	1538.3	1555.1
22.5°	1445.8	1484.5	1491.2	1534.9	1566.9
25°	1415.6	1452.5	1476.1	1534.9	1578.6
27.5°	1380.3	1417.2	1464.3	1529.9	1565.2
30°	1344.9	1380.3	1439.1	1508.0	1540.0
32.5°	1301.2	1338.2	1402.1	1477.8	1506.3
35°	1254.2	1289.5	1365.1	1442.5	1459.3
37.5°	1202.0	1239.0	1324.8	1376.9	1383.6
40°	1141.5	1193.6	1274.3	1282.7	1260.9
42.5°	1082.7	1153.3	1203.7	1160.0	1044.0
45°	1022.2	1101.2	1123.0	953.2	886.0
47.5°	958.3	1037.3	1012.1	820.4	773.3
50°	892.7	966.7	870.9	714.5	670.8
52.5°	818.7	882.6	744.8	613.6	541.3
55°	741.4	786.8	654.0	494.3	430.4
57.5°	648.9	682.6	576.6	388.4	307.7
60°	556.5	581.7	489.2	304.3	269.0
62.5°	472.4	494.3	398.4	253.9	247.1
65°	396.8	418.6	319.4	225.3	223.6
67.5°	327.8	351.4	255.5	201.7	200.1
70°	267.3	292.5	203.4	176.5	173.2
72.5°	216.9	240.4	164.8	149.6	147.9
75°	171.5	190.0	132.8	124.4	122.7
77.5°	131.1	144.6	104.2	99.2	97.5
80°	97.5	102.6	77.3	75.7	74.0
82.5°	67.2	63.9	53.8	52.1	48.8
85°	38.7	35.3	31.9	25.2	20.2
87.5°	15.1	15.1	6.7	5.0	5.0
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	22.72	24.25	23.09	24.56	24.87	19.13	20.65	19.49	20.96	21.28
	3H	23.87	25.23	24.25	25.56	25.92	20.28	21.64	20.66	21.97	22.33
	4H	24.24	25.52	24.64	25.87	26.24	20.77	22.04	21.17	22.39	22.77
	6H	24.49	25.66	24.90	26.03	26.42	21.15	22.32	21.56	22.69	23.08
	8H	24.56	25.68	24.98	26.06	26.47	21.25	22.37	21.68	22.76	23.16
	12H	24.59	25.66	25.02	26.04	26.47	21.28	22.36	21.72	22.74	23.17
4H	2H	22.91	24.19	23.31	24.54	24.91	19.92	21.19	20.32	21.54	21.92
	3H	24.28	25.33	24.69	25.73	26.14	21.23	22.28	21.64	22.68	23.08
	4H	24.78	25.73	25.21	26.14	26.58	21.80	22.75	22.24	23.17	23.60
	6H	25.15	25.97	25.61	26.42	26.88	22.28	23.10	22.74	23.54	24.00
	8H	25.26	26.02	25.72	26.47	26.94	22.41	23.18	22.87	23.62	24.09
	12H	25.32	26.01	25.80	26.49	26.96	22.47	23.15	22.95	23.63	24.10
8H	4H	24.84	25.61	25.31	26.06	26.52	22.12	22.89	22.59	23.33	23.80
	6H	25.30	25.93	25.79	26.42	26.90	22.69	23.32	23.19	23.82	24.29
	8H	25.45	26.02	25.97	26.53	27.02	22.88	23.45	23.39	23.96	24.45
	12H	25.57	26.07	26.08	26.57	27.13	22.98	23.48	23.49	23.97	24.54
12H	4H	24.83	25.52	25.31	26.00	26.47	22.16	22.84	22.64	23.32	23.79
	6H	25.29	25.86	25.80	26.37	26.86	22.74	23.31	23.26	23.82	24.31
	8H	25.48	25.99	25.99	26.48	27.05	22.98	23.48	23.49	23.98	24.54