

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: P845596

Luminaire Tested: SQ2R-PP3-075D-835-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845596
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-835-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS
750 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

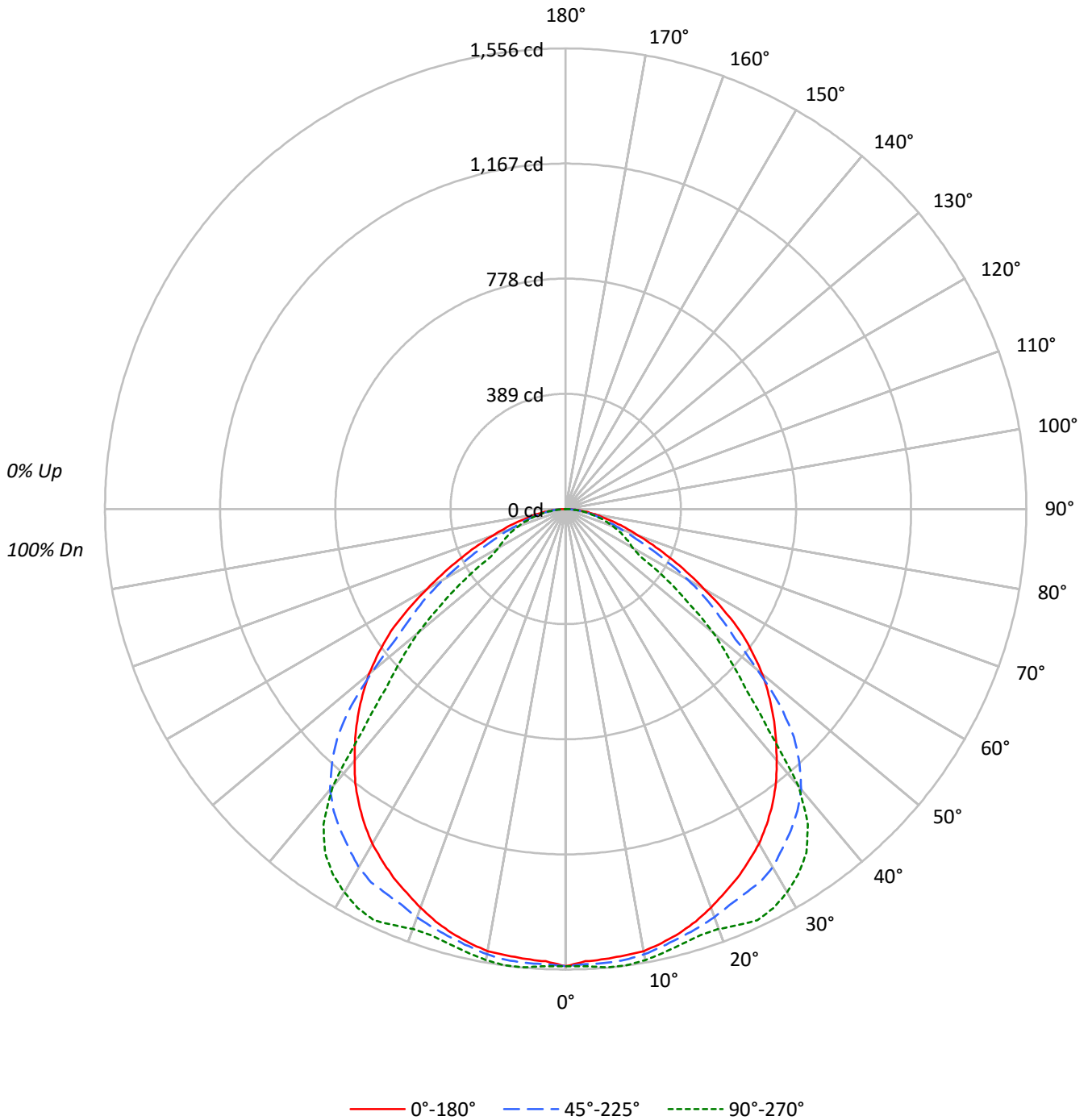
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3890.1 lumens
Efficiency: N/A
Efficacy: 145.7 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

TEST NUMBER: P845596
CATALOG NUMBER: SQ2R-PP3-075D-835-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P845596

CATALOG NUMBER: SQ2R-PP3-075D-835-UNV-STD-W-4

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°	24936	24936	24936
5°	24739	24951	25190
10°	24865	25051	25373
15°	24806	25050	25432
20°	24627	25216	25947
25°	24488	25534	27309
30°	24349	26053	27880
35°	24005	26128	27930
40°	23364	26081	25807
45°	22665	24900	19644
50°	21775	21240	16362
55°	20265	17875	11764
60°	17450	15342	8435
65°	14720	11851	8294
70°	12255	9323	7936
75°	10387	8047	7436
80°	8805	6983	6676
85°	6947	5743	3631

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 24900 cd/sqm

TEST NUMBER: P845596

CATALOG NUMBER: SQ2R-PP3-075D-835-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.1	3.8
10°-20°	425.7	10.9
20°-30°	667.2	17.2
30°-40°	823.8	21.2
40°-50°	775.5	19.9
50°-60°	548.3	14.1
60°-70°	311.5	8.0
70°-80°	154.3	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°	1240.0	31.9
0°-40°	2063.8	53.1
0°-60°	3387.6	87.1
0°-90°	3890.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3890.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1544	1544	1544	1544	1544	
5°	1526	1554	1540	1543	1554	145
15°	1484	1505	1499	1513	1522	418
25°	1375	1410	1433	1490	1533	633
35°	1218	1252	1326	1401	1417	760
45°	993	1069	1090	926	860	765
55°	720	764	635	480	418	636
65°	385	406	310	219	217	386
75°	166	184	129	121	119	180
85°	38	34	31	24	20	45
90°	0	0	0	0	0	



TEST NUMBER: P845596

CATALOG NUMBER: SQ2R-PP3-075D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1544.4	1544.4	1544.4	1544.4	1544.4
2.5°	1529.7	1557.4	1539.5	1542.7	1546.0
5°	1526.4	1554.2	1539.5	1542.7	1554.2
7.5°	1521.5	1550.9	1536.2	1541.1	1555.8
10°	1516.6	1541.1	1528.0	1536.2	1547.6
12.5°	1501.9	1524.8	1513.3	1524.8	1534.6
15°	1484.0	1505.2	1498.6	1513.3	1521.5
17.5°	1461.1	1485.6	1484.0	1503.5	1510.1
20°	1433.3	1464.4	1467.6	1493.8	1510.1
22.5°	1404.0	1441.5	1448.0	1490.5	1521.5
25°	1374.6	1410.5	1433.3	1490.5	1532.9
27.5°	1340.3	1376.2	1421.9	1485.6	1519.9
30°	1306.0	1340.3	1397.4	1464.4	1495.4
32.5°	1263.6	1299.5	1361.5	1435.0	1462.7
35°	1217.9	1252.1	1325.6	1400.7	1417.0
37.5°	1167.2	1203.2	1286.4	1337.0	1343.6
40°	1108.5	1159.1	1237.4	1245.6	1224.4
42.5°	1051.3	1119.9	1168.9	1126.4	1013.8
45°	992.6	1069.3	1090.5	925.6	860.3
47.5°	930.5	1007.3	982.8	796.7	751.0
50°	866.9	938.7	845.6	693.8	651.4
52.5°	795.0	857.1	723.2	595.9	525.7
55°	719.9	764.0	635.0	480.0	417.9
57.5°	630.2	662.8	560.0	377.1	298.8
60°	540.4	564.9	475.1	295.5	261.2
62.5°	458.7	480.0	386.9	246.5	240.0
65°	385.3	406.5	310.2	218.8	217.1
67.5°	318.3	341.2	248.1	195.9	194.3
70°	259.6	284.1	197.5	171.4	168.1
72.5°	210.6	233.4	160.0	145.3	143.7
75°	166.5	184.5	129.0	120.8	119.2
77.5°	127.3	140.4	101.2	96.3	94.7
80°	94.7	99.6	75.1	73.5	71.8
82.5°	65.3	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



TEST NUMBER: P845596

CATALOG NUMBER: SQ2R-PP3-075D-835-UNV-STD-W-4

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	22.99	24.46	24.77	19.03	20.55	19.39	20.86	21.18
	3H	23.77	25.13	24.15	25.46	25.82	20.18	21.54	20.55	21.86	22.23
	4H	24.14	25.41	24.54	25.76	26.14	20.67	21.94	21.07	22.29	22.67
	6H	24.39	25.56	24.80	25.93	26.32	21.04	22.22	21.46	22.59	22.98
	8H	24.45	25.57	24.88	25.96	26.36	21.15	22.27	21.57	22.66	23.06
	12H	24.49	25.56	24.92	25.94	26.37	21.18	22.25	21.61	22.64	23.07
4H	2H	22.81	24.08	23.21	24.43	24.81	19.82	21.09	20.22	21.44	21.82
	3H	24.18	25.23	24.59	25.63	26.03	21.12	22.18	21.53	22.58	22.98
	4H	24.68	25.62	25.11	26.04	26.48	21.70	22.65	22.14	23.06	23.50
	6H	25.05	25.87	25.51	26.31	26.77	22.18	23.00	22.63	23.44	23.90
	8H	25.15	25.92	25.62	26.37	26.83	22.31	23.08	22.77	23.52	23.99
	12H	25.22	25.90	25.70	26.38	26.85	22.37	23.05	22.85	23.53	24.00
8H	4H	24.74	25.51	25.21	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	22.59	23.22	23.08	23.71	24.19
	8H	25.35	25.92	25.87	26.43	26.92	22.77	23.34	23.29	23.85	24.34
	12H	25.46	25.97	25.97	26.46	27.03	22.87	23.38	23.38	23.87	24.44
12H	4H	24.73	25.41	25.21	25.89	26.36	22.06	22.74	22.54	23.22	23.69
	6H	25.18	25.76	25.70	26.27	26.75	22.64	23.21	23.15	23.72	24.21
	8H	25.38	25.89	25.89	26.38	26.94	22.88	23.38	23.39	23.87	24.44