

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: P845620

Luminaire Tested: SQ2R-PR1-075D-835-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845620
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-9)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-PR1-075D-835-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS
750 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

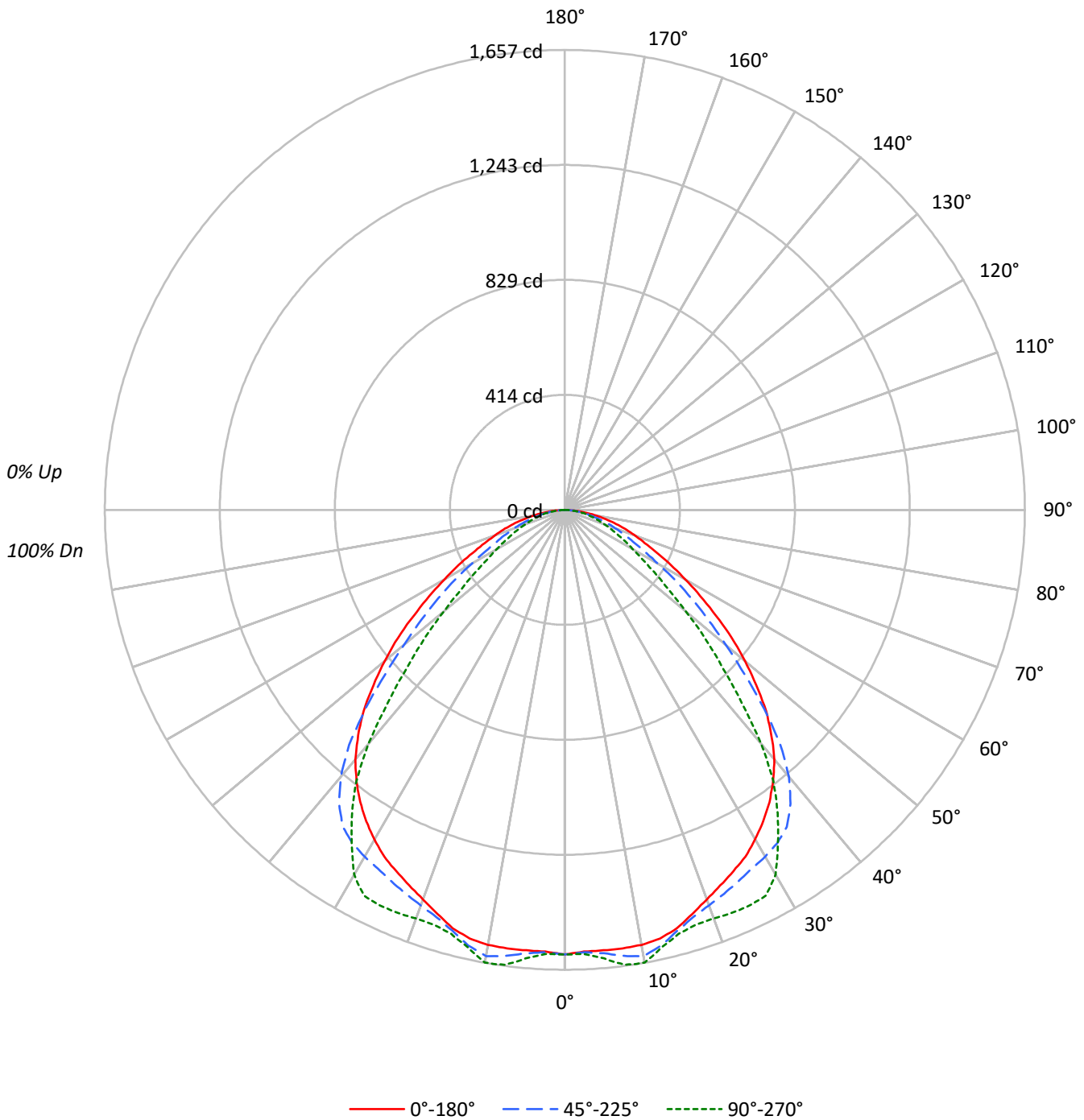
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3853.0 lumens
Efficiency: N/A
Efficacy: 144.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.33 / 1.36
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	108	104	101	97	100	97	94	96	94	92	92	91	89	87			87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75			75	
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65			65	
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56			56	
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	52	50			50	
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44			44	
7	69	56	48	42	67	55	48	42	54	47	42	52	46	41	51	45	41	39			39	
8	64	51	43	38	63	51	43	38	49	42	38	48	42	37	47	41	37	35			35	
9	60	47	40	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32			32	
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	40	35	31	29			29	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25858	25858	25858
5°	25823	25982	26300
10°	26096	26765	27166
15°	26088	26223	26442
20°	25667	26058	26928
25°	25593	26320	28035
30°	25566	26905	28305
35°	25324	27480	26353
40°	24740	26460	23191
45°	23409	23224	18340
50°	21283	18987	14230
55°	18702	15626	11074
60°	16185	12494	9119
65°	13971	10353	7985
70°	12562	9172	7091
75°	11510	7941	6519
80°	10014	6378	6378
85°	7262	5743	3020

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 25348 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.6	4.0
10°-20°	447.9	11.6
20°-30°	692.6	18.0
30°-40°	834.0	21.6
40°-50°	748.7	19.4
50°-60°	499.8	13.0
60°-70°	290.4	7.5
70°-80°	149.2	3.9
80°-90°	35.9	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°	1295.1	33.6
0°-40°	2129.1	55.3
0°-60°	3377.5	87.7
0°-90°	3853.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3853.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1602	1602	1602	1602	1602	
5°	1593	1621	1603	1606	1623	152
15°	1561	1626	1569	1574	1582	439
25°	1437	1495	1477	1531	1574	663
35°	1285	1296	1394	1368	1337	802
45°	1025	1110	1017	859	803	785
55°	664	691	555	429	393	597
65°	366	374	271	220	209	369
75°	184	180	127	108	104	196
85°	39	31	31	21	16	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1601.5	1601.5	1601.5	1601.5	1601.5
2.5°	1593.3	1617.8	1595.0	1596.6	1601.5
5°	1593.3	1621.1	1603.1	1606.4	1622.7
7.5°	1593.3	1630.9	1621.1	1632.5	1653.7
10°	1591.7	1639.0	1632.5	1634.1	1657.0
12.5°	1581.9	1639.0	1608.0	1604.8	1614.6
15°	1560.7	1626.0	1568.8	1573.7	1581.9
17.5°	1526.4	1595.0	1537.8	1554.2	1567.2
20°	1493.8	1560.7	1516.6	1539.5	1567.2
22.5°	1464.4	1531.3	1497.0	1531.3	1572.1
25°	1436.6	1495.4	1477.4	1531.3	1573.7
27.5°	1408.9	1446.4	1457.8	1532.9	1567.2
30°	1371.3	1394.2	1443.1	1506.8	1518.2
32.5°	1330.5	1341.9	1423.6	1449.7	1428.5
35°	1284.8	1296.2	1394.2	1368.0	1337.0
37.5°	1232.5	1252.1	1335.4	1268.5	1234.2
40°	1173.8	1213.0	1255.4	1141.1	1100.3
42.5°	1101.9	1170.5	1149.3	995.8	943.6
45°	1025.2	1110.1	1017.1	858.7	803.2
47.5°	935.4	1026.9	878.3	734.6	684.0
50°	847.3	917.5	755.9	623.6	566.5
52.5°	757.5	803.2	651.4	519.1	468.5
55°	664.4	690.6	555.1	429.4	393.4
57.5°	577.9	595.9	470.2	357.5	329.8
60°	501.2	512.6	386.9	303.6	282.4
62.5°	431.0	439.1	320.0	257.9	243.2
65°	365.7	373.8	271.0	220.4	209.0
67.5°	311.8	316.7	230.2	189.4	177.9
70°	266.1	267.7	194.3	158.4	150.2
72.5°	225.3	222.0	160.0	132.2	127.3
75°	184.5	179.6	127.3	107.7	104.5
77.5°	145.3	140.4	94.7	86.5	86.5
80°	107.7	101.2	68.6	68.6	68.6
82.5°	73.5	63.7	49.0	49.0	47.3
85°	39.2	31.0	31.0	21.2	16.3
87.5°	13.1	13.1	4.9	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	22.01	23.50	22.37	23.82	24.13	18.74	20.23	19.10	20.55	20.86
	3H	23.29	24.62	23.66	24.95	25.31	19.85	21.19	20.23	21.51	21.88
	4H	23.77	25.02	24.17	25.37	25.75	20.28	21.53	20.68	21.88	22.26
	6H	24.11	25.27	24.53	25.63	26.03	20.64	21.79	21.05	22.16	22.55
	8H	24.21	25.31	24.64	25.70	26.10	20.74	21.84	21.17	22.23	22.63
	12H	24.26	25.31	24.69	25.69	26.12	20.77	21.82	21.20	22.20	22.63
4H	2H	22.16	23.41	22.56	23.76	24.14	19.38	20.63	19.78	20.98	21.36
	3H	23.69	24.72	24.10	25.12	25.52	20.70	21.73	21.11	22.13	22.54
	4H	24.31	25.23	24.74	25.65	26.09	21.23	22.16	21.66	22.57	23.01
	6H	24.79	25.59	25.25	26.04	26.50	21.70	22.50	22.16	22.95	23.41
	8H	24.93	25.68	25.40	26.13	26.60	21.83	22.58	22.29	23.03	23.50
	12H	25.01	25.68	25.49	26.16	26.63	21.88	22.55	22.36	23.03	23.50
8H	4H	24.37	25.13	24.84	25.57	26.04	21.58	22.33	22.04	22.77	23.24
	6H	24.94	25.56	25.44	26.05	26.53	22.13	22.75	22.63	23.25	23.72
	8H	25.14	25.70	25.65	26.21	26.70	22.32	22.88	22.83	23.39	23.88
	12H	25.27	25.76	25.78	26.26	26.82	22.41	22.90	22.92	23.39	23.96
12H	4H	24.36	25.03	24.84	25.51	25.98	21.62	22.29	22.10	22.77	23.24
	6H	24.93	25.49	25.44	26.00	26.49	22.19	22.75	22.71	23.26	23.75
	8H	25.16	25.66	25.67	26.15	26.72	22.42	22.92	22.94	23.41	23.98