

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: P845623

Luminaire Tested: SQ2R-PR1-075D-935-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845623
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-935-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS
750 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

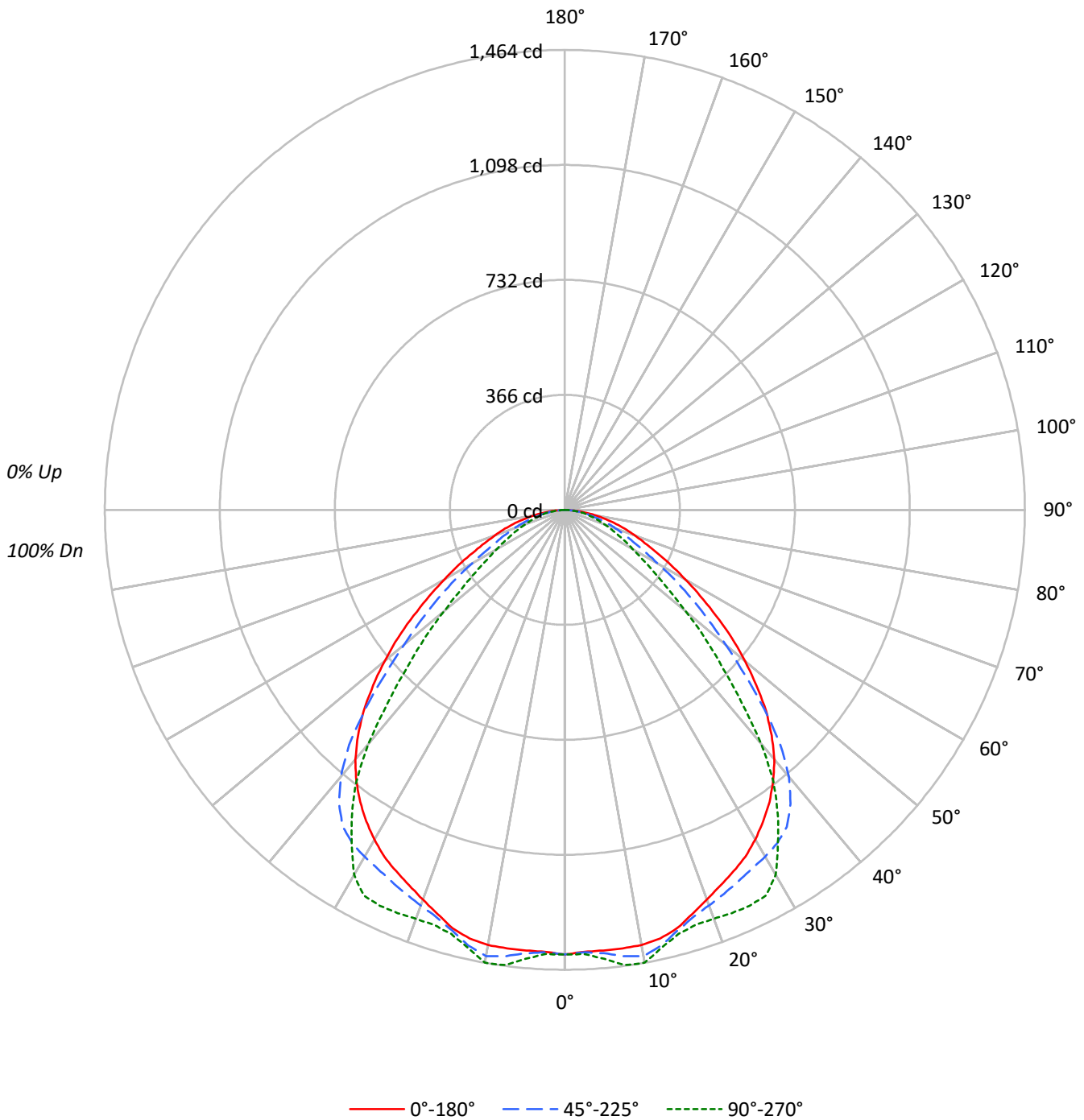
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3404.7 lumens
Efficiency: N/A
Efficacy: 127.5 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°	22850	22850	22850
5°	22820	22960	23240
10°	23059	23651	24005
15°	23052	23173	23366
20°	22680	23027	23795
25°	22616	23257	24773
30°	22592	23774	25012
35°	22377	24283	23288
40°	21861	23381	20493
45°	20685	20521	16205
50°	18806	16777	12574
55°	16527	13807	9788
60°	14302	11041	8060
65°	12344	9150	7056
70°	11098	8105	6264
75°	10168	7018	5758
80°	8852	5635	5635
85°	6410	5076	2668

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 22400 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.6	4.0
10°-20°	395.8	11.6
20°-30°	612.0	18.0
30°-40°	736.9	21.6
40°-50°	661.6	19.4
50°-60°	441.6	13.0
60°-70°	256.6	7.5
70°-80°	131.9	3.9
80°-90°	31.7	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°	1144.4	33.6
0°-40°	1881.4	55.3
0°-60°	2984.6	87.7
0°-90°	3404.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3404.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1415	1415	1415	1415	1415	
5°	1408	1432	1417	1420	1434	134
15°	1379	1437	1386	1391	1398	388
25°	1270	1321	1306	1353	1391	586
35°	1135	1145	1232	1209	1182	708
45°	906	981	899	759	710	694
55°	587	610	490	379	348	527
65°	323	330	240	195	185	326
75°	163	159	112	95	92	173
85°	35	27	27	19	14	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1415.2	1415.2	1415.2	1415.2	1415.2
2.5°	1408.0	1429.6	1409.4	1410.8	1415.2
5°	1408.0	1432.5	1416.6	1419.5	1433.9
7.5°	1408.0	1441.1	1432.5	1442.6	1461.3
10°	1406.5	1448.4	1442.6	1444.0	1464.2
12.5°	1397.9	1448.4	1420.9	1418.1	1426.7
15°	1379.1	1436.8	1386.3	1390.6	1397.9
17.5°	1348.8	1409.4	1358.9	1373.3	1384.9
20°	1320.0	1379.1	1340.2	1360.4	1384.9
22.5°	1294.0	1353.1	1322.8	1353.1	1389.2
25°	1269.5	1321.4	1305.5	1353.1	1390.6
27.5°	1244.9	1278.1	1288.2	1354.6	1384.9
30°	1211.8	1232.0	1275.2	1331.5	1341.6
32.5°	1175.7	1185.8	1257.9	1281.0	1262.3
35°	1135.3	1145.4	1232.0	1208.9	1181.5
37.5°	1089.1	1106.5	1180.0	1120.9	1090.6
40°	1037.2	1071.8	1109.3	1008.4	972.3
42.5°	973.7	1034.3	1015.6	880.0	833.8
45°	905.9	981.0	898.7	758.8	709.7
47.5°	826.6	907.4	776.1	649.2	604.4
50°	748.7	810.7	667.9	551.1	500.6
52.5°	669.4	709.7	575.6	458.7	414.0
55°	587.1	610.2	490.5	379.4	347.7
57.5°	510.7	526.5	415.5	315.9	291.4
60°	442.9	453.0	341.9	268.3	249.6
62.5°	380.8	388.1	282.7	227.9	214.9
65°	323.1	330.4	239.5	194.7	184.7
67.5°	275.5	279.9	203.4	167.3	157.2
70°	235.1	236.6	171.7	139.9	132.7
72.5°	199.1	196.2	141.4	116.8	112.5
75°	163.0	158.7	112.5	95.2	92.3
77.5°	128.4	124.1	83.7	76.5	76.5
80°	95.2	89.4	60.6	60.6	60.6
82.5°	64.9	56.3	43.3	43.3	41.8
85°	34.6	27.4	27.4	18.8	14.4
87.5°	11.5	11.5	4.3	4.3	4.3
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	21.58	23.07	21.94	23.39	23.70	18.31	19.80	18.67	20.12	20.43
	3H	22.86	24.19	23.24	24.52	24.88	19.42	20.76	19.80	21.08	21.45
	4H	23.34	24.59	23.74	24.94	25.32	19.85	21.10	20.25	21.45	21.83
	6H	23.68	24.84	24.10	25.20	25.60	20.21	21.36	20.62	21.73	22.12
	8H	23.78	24.88	24.21	25.27	25.67	20.31	21.41	20.74	21.80	22.20
	12H	23.83	24.88	24.26	25.26	25.69	20.34	21.39	20.77	21.77	22.20
4H	2H	21.73	22.98	22.13	23.33	23.71	18.95	20.20	19.35	20.55	20.93
	3H	23.26	24.29	23.67	24.69	25.09	20.27	21.30	20.68	21.70	22.11
	4H	23.88	24.80	24.31	25.22	25.66	20.80	21.73	21.23	22.14	22.58
	6H	24.36	25.16	24.82	25.61	26.07	21.27	22.07	21.72	22.51	22.98
	8H	24.50	25.25	24.97	25.70	26.17	21.40	22.15	21.86	22.60	23.06
	12H	24.58	25.25	25.06	25.73	26.20	21.45	22.12	21.93	22.60	23.07
8H	4H	23.94	24.70	24.41	25.14	25.61	21.15	21.90	21.61	22.34	22.81
	6H	24.51	25.13	25.01	25.62	26.10	21.70	22.32	22.20	22.82	23.29
	8H	24.71	25.27	25.22	25.78	26.27	21.89	22.45	22.40	22.96	23.45
	12H	24.84	25.33	25.35	25.83	26.39	21.98	22.47	22.49	22.96	23.53
12H	4H	23.93	24.60	24.41	25.08	25.55	21.19	21.86	21.67	22.34	22.81
	6H	24.50	25.06	25.01	25.57	26.06	21.76	22.32	22.28	22.83	23.32
	8H	24.73	25.23	25.24	25.72	26.29	21.99	22.49	22.51	22.98	23.55