

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: P688584

Luminaire Tested: SQ4R-PR1-100D-830-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688584
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PR1-100D-830-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3742.5 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

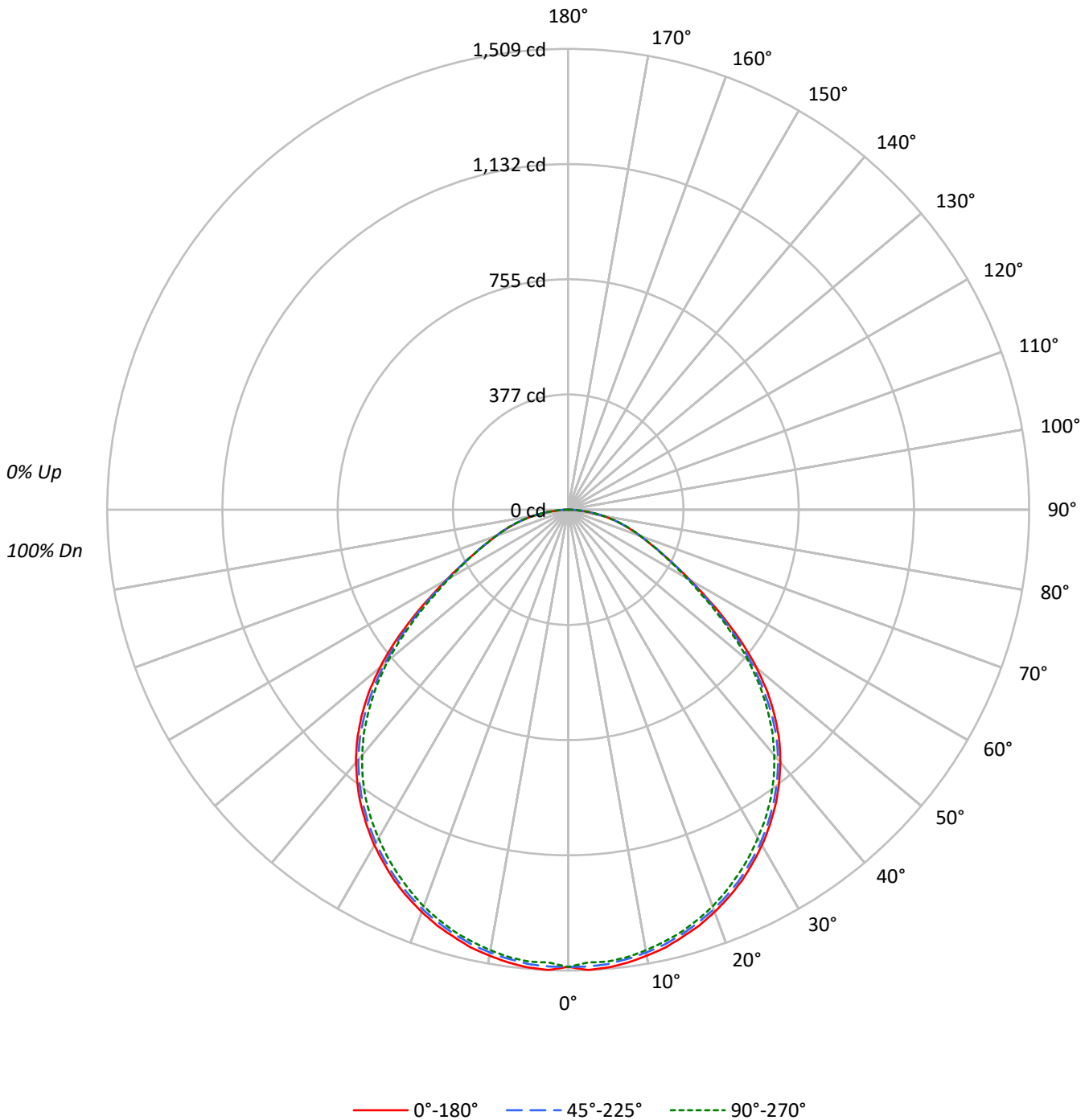
Input Watts (W): 37
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93		95	92	90		91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81	78	75	72
3	92	82	74	68	90	80	73	68	78	71	66		75	70	65		72	68	64	62
4	85	73	65	58	82	72	64	58	69	63	57		67	61	56		65	60	56	54
5	78	66	57	51	76	65	57	50	63	55	50		61	54	49		59	53	49	47
6	72	59	51	45	70	58	50	44	57	49	44		55	49	44		53	48	43	41
7	67	54	46	40	65	53	45	39	52	44	39		50	44	39		49	43	39	37
8	63	49	41	36	61	49	41	35	47	40	35		46	40	35		45	39	35	33
9	58	45	37	32	57	45	37	32	44	37	32		43	36	32		42	36	31	30
10	55	42	34	29	54	41	34	29	40	34	29		40	33	29		39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14412	14412	14412
5°	14543	14430	14355
10°	14497	14395	14320
15°	14432	14342	14266
20°	14360	14267	14162
25°	14259	14163	13998
30°	14105	14005	13804
35°	13897	13775	13578
40°	13581	13434	13191
45°	13027	12798	12535
50°	12051	11762	11530
55°	10519	10281	10064
60°	8863	8790	8615
65°	7666	7695	7638
70°	7043	7077	7077
75°	6762	6762	6811
80°	6365	6431	6365
85°	5125	5700	5700

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13027 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.6	3.8
10°-20°	405.3	10.8
20°-30°	611.2	16.3
30°-40°	728.4	19.5
40°-50°	718.6	19.2
50°-60°	548.2	14.6
60°-70°	338.3	9.0
70°-80°	192.8	5.2
80°-90°	58.1	1.6
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°	1158.1	30.9
0°-40°	1886.6	50.4
0°-60°	3153.3	84.3
0°-90°	3742.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3742.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1497	1497	1497	1497	1497	
5°	1505	1488	1493	1488	1485	143
15°	1448	1433	1439	1434	1431	409
25°	1342	1326	1333	1319	1318	618
35°	1182	1168	1172	1157	1155	738
45°	957	944	940	923	921	734
55°	627	616	612	602	600	561
65°	336	334	338	335	335	340
75°	182	182	182	183	183	192
85°	46	49	52	52	52	55
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1497.0	1497.0	1497.0	1497.0	1497.0
2.5°	1508.6	1491.9	1497.0	1493.2	1484.1
5°	1504.8	1488.0	1493.2	1488.0	1485.4
7.5°	1495.8	1479.0	1484.1	1479.0	1477.7
10°	1482.9	1467.4	1472.5	1467.4	1464.8
12.5°	1468.7	1451.9	1458.4	1451.9	1449.3
15°	1448.0	1432.6	1439.0	1433.9	1431.3
17.5°	1427.4	1410.6	1417.1	1411.9	1408.1
20°	1401.6	1386.1	1392.6	1383.6	1382.3
22.5°	1373.3	1357.8	1364.2	1351.3	1351.3
25°	1342.3	1325.5	1333.3	1319.1	1317.8
27.5°	1306.2	1290.7	1297.2	1283.0	1281.7
30°	1268.8	1253.3	1259.8	1244.3	1241.7
32.5°	1226.3	1212.1	1217.2	1201.8	1200.5
35°	1182.4	1168.2	1172.1	1156.6	1155.3
37.5°	1133.4	1120.5	1123.1	1106.3	1105.1
40°	1080.6	1067.7	1068.9	1050.9	1049.6
42.5°	1022.5	1009.6	1008.3	990.3	989.0
45°	956.8	943.9	940.0	923.2	920.7
47.5°	884.6	871.7	863.9	849.7	848.5
50°	804.6	791.7	785.3	773.7	769.8
52.5°	718.2	705.3	700.2	689.9	686.0
55°	626.7	616.4	612.5	602.2	599.6
57.5°	539.0	531.2	530.0	519.6	518.4
60°	460.3	456.5	456.5	447.4	447.4
62.5°	393.3	390.7	393.3	388.1	386.8
65°	336.5	334.0	337.8	335.3	335.3
67.5°	288.8	288.8	291.4	290.1	290.1
70°	250.2	250.2	251.4	251.4	251.4
72.5°	215.3	214.0	217.9	217.9	216.6
75°	181.8	181.8	181.8	183.1	183.1
77.5°	148.3	148.3	149.6	149.6	148.3
80°	114.8	116.0	116.0	114.8	114.8
82.5°	81.2	82.5	82.5	82.5	81.2
85°	46.4	49.0	51.6	51.6	51.6
87.5°	16.8	21.9	25.8	25.8	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)