

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: P688620

Luminaire Tested: SQ4R-PW1-100D-830-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688620
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-35)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PW1-100D-830-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES 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: 3617.8 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

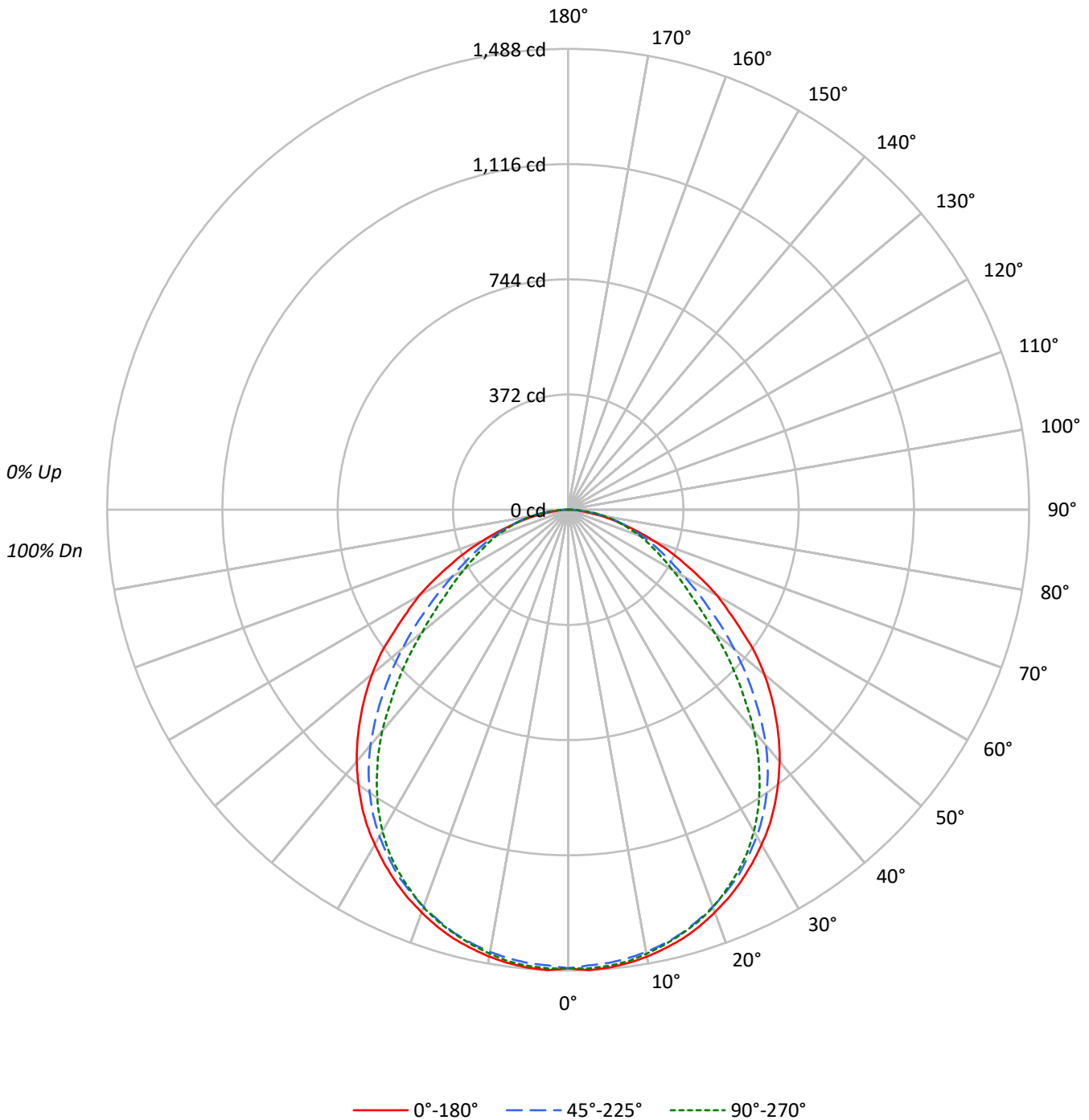
Input Watts (W): 37
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	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	59	50	44	57	49	44	55	49	44	54	48	43	41
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14255	14255	14255
5°	14346	14199	14291
10°	14327	14177	14234
15°	14284	14113	14132
20°	14175	13981	14000
25°	14051	13828	13728
30°	13879	13540	13329
35°	13667	13130	12660
40°	13347	12486	11744
45°	12904	11531	10520
50°	12371	10462	9207
55°	11501	9295	8146
60°	10700	8318	7477
65°	9495	7718	7066
70°	8250	7338	6964
75°	6796	6937	6655
80°	5383	6542	6542
85°	3999	5888	6097

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12904 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.5	3.9
10°-20°	401.3	11.1
20°-30°	601.0	16.6
30°-40°	698.3	19.3
40°-50°	658.9	18.2
50°-60°	514.0	14.2
60°-70°	349.0	9.6
70°-80°	196.5	5.4
80°-90°	58.3	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°	1142.8	31.6
0°-40°	1841.1	50.9
0°-60°	3014.0	83.3
0°-90°	3617.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3617.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1481	1481	1481	1481	1481	
5°	1484	1481	1469	1481	1479	141
15°	1433	1427	1416	1424	1418	404
25°	1323	1317	1302	1298	1292	609
35°	1163	1151	1117	1092	1077	726
45°	948	919	847	794	773	731
55°	685	645	554	500	485	615
65°	417	379	339	318	310	416
75°	183	190	186	179	179	199
85°	36	51	53	53	55	44
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1480.7	1480.7	1480.7	1480.7	1480.7
2.5°	1488.3	1484.5	1473.1	1484.5	1482.6
5°	1484.5	1480.7	1469.3	1480.7	1478.8
7.5°	1476.9	1475.0	1461.7	1473.1	1471.2
10°	1465.5	1463.6	1450.2	1459.8	1456.0
12.5°	1450.2	1448.3	1435.0	1442.6	1438.8
15°	1433.1	1427.4	1416.0	1423.6	1417.9
17.5°	1410.3	1404.6	1391.2	1397.0	1395.0
20°	1383.6	1377.9	1364.6	1370.3	1366.5
22.5°	1355.1	1349.4	1334.1	1336.0	1330.3
25°	1322.7	1317.0	1301.8	1298.0	1292.3
27.5°	1286.6	1282.8	1259.9	1256.1	1250.4
30°	1248.5	1242.8	1218.0	1210.4	1199.0
32.5°	1208.5	1197.1	1170.5	1155.2	1141.9
35°	1162.9	1151.4	1117.2	1092.4	1077.2
37.5°	1113.4	1096.2	1058.2	1023.9	1008.7
40°	1062.0	1043.0	993.5	947.8	934.5
42.5°	1006.8	984.0	921.2	873.6	850.7
45°	947.8	919.2	846.9	793.6	772.7
47.5°	888.8	852.6	774.6	717.5	694.7
50°	826.0	782.2	698.5	637.6	614.7
52.5°	761.3	713.7	628.1	565.3	548.1
55°	685.2	645.2	553.8	500.5	485.3
57.5°	616.6	572.9	492.9	447.3	435.8
60°	555.7	502.4	432.0	397.8	388.3
62.5°	485.3	437.7	382.5	355.9	346.4
65°	416.8	378.7	338.8	317.8	310.2
67.5°	357.8	325.4	298.8	281.7	277.9
70°	293.1	276.0	260.7	247.4	247.4
72.5°	237.9	232.2	222.7	215.1	209.4
75°	182.7	190.3	186.5	178.9	178.9
77.5°	138.9	150.4	152.3	148.4	150.4
80°	97.1	114.2	118.0	116.1	118.0
82.5°	60.9	81.8	85.6	85.6	87.5
85°	36.2	51.4	53.3	53.3	55.2
87.5°	15.2	24.7	26.6	26.6	26.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)