

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: P688476

Luminaire Tested: SQ4R-PC3-100D-830-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688476
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PC3-100D-830-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE PYRAMID 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: 3902.3 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

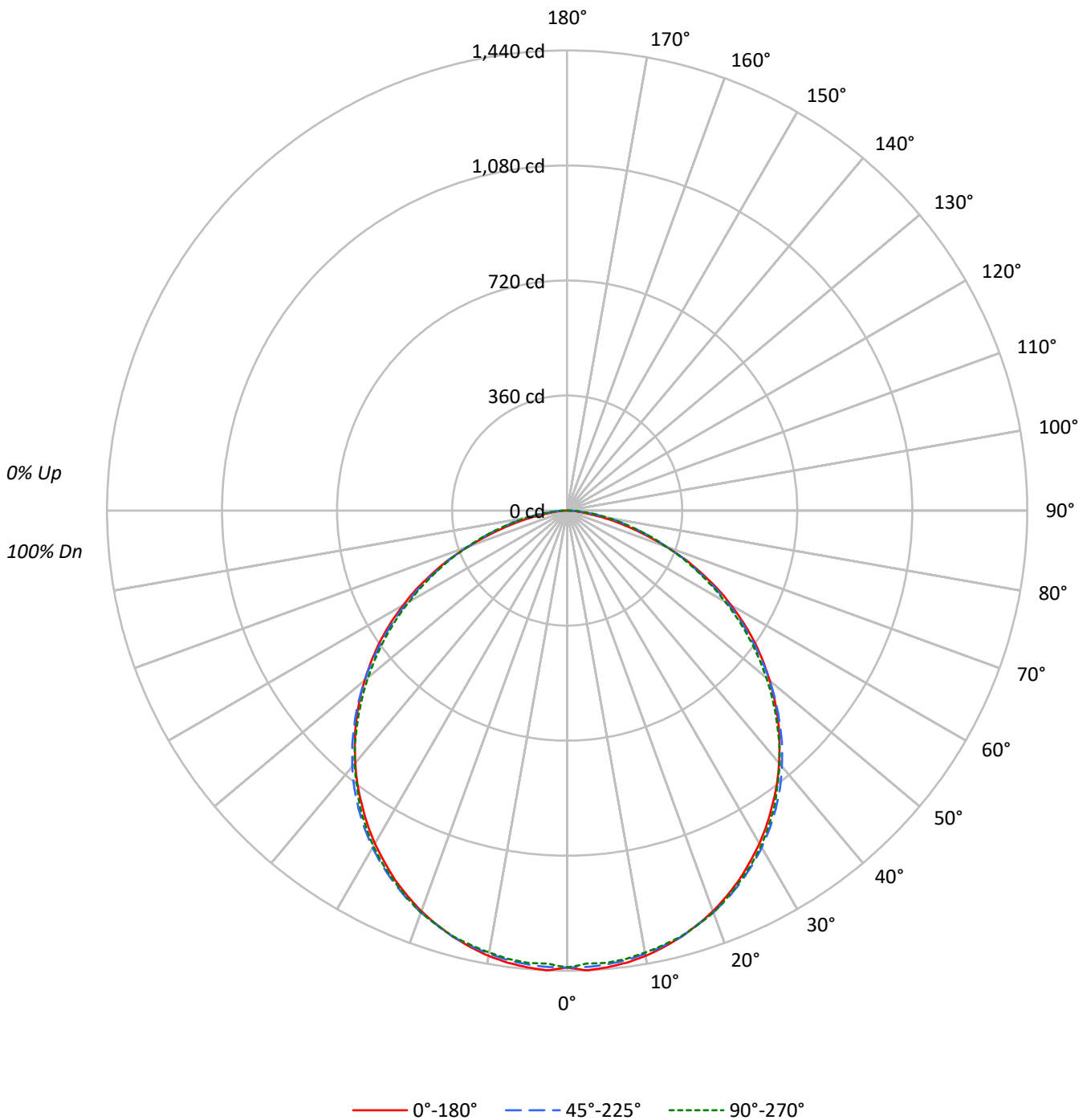
Input Watts (W): 37
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	100	97	106	102	98	95	98	95	92	94	92	89	91	88	87	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	54	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13763	13763	13763
5°	13867	13777	13726
10°	13833	13768	13729
15°	13760	13760	13747
20°	13670	13711	13711
25°	13541	13639	13597
30°	13376	13538	13479
35°	13177	13379	13285
40°	12960	13142	13009
45°	12723	12813	12616
50°	12391	12391	12193
55°	11998	11842	11664
60°	11418	11189	11010
65°	10554	10342	10253
70°	9241	9314	9278
75°	7436	8224	8273
80°	5284	6975	7047
85°	3214	5843	5843

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 12813 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.4	3.5
10°-20°	388.5	10.0
20°-30°	588.3	15.1
30°-40°	705.4	18.1
40°-50°	719.1	18.4
50°-60°	627.7	16.1
60°-70°	449.4	11.5
70°-80°	230.8	5.9
80°-90°	57.7	1.5
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°	1112.1	28.5
0°-40°	1817.4	46.6
0°-60°	3164.3	81.1
0°-90°	3902.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3902.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1430	1430	1430	1430	1430	
5°	1435	1420	1426	1422	1420	136
15°	1381	1369	1381	1381	1379	389
25°	1275	1265	1284	1280	1280	587
35°	1121	1118	1138	1130	1130	702
45°	934	932	941	929	927	720
55°	715	706	706	695	695	638
65°	463	453	454	450	450	459
75°	200	209	221	222	222	215
85°	29	45	53	54	53	39
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1429.6	1429.6	1429.6	1429.6	1429.6
2.5°	1440.2	1424.3	1429.6	1425.6	1419.0
5°	1434.9	1420.3	1425.6	1421.6	1420.3
7.5°	1426.9	1412.4	1419.0	1416.4	1415.0
10°	1415.0	1400.5	1408.4	1405.8	1404.4
12.5°	1399.1	1385.9	1395.2	1392.5	1392.5
15°	1380.6	1368.7	1380.6	1380.6	1379.3
17.5°	1358.1	1347.5	1359.4	1360.8	1359.4
20°	1334.3	1322.4	1338.3	1336.9	1338.3
22.5°	1305.2	1295.9	1313.1	1309.1	1310.5
25°	1274.7	1265.4	1284.0	1280.0	1280.0
27.5°	1239.0	1232.4	1252.2	1248.2	1248.2
30°	1203.2	1196.6	1217.8	1212.5	1212.5
32.5°	1163.5	1159.6	1179.4	1172.8	1172.8
35°	1121.2	1118.5	1138.4	1130.4	1130.4
37.5°	1078.8	1076.2	1094.7	1085.4	1081.5
40°	1031.2	1029.8	1045.7	1035.1	1035.1
42.5°	983.5	982.2	995.4	982.2	982.2
45°	934.5	931.9	941.1	929.2	926.6
47.5°	881.6	878.9	885.5	872.3	871.0
50°	827.3	824.7	827.3	815.4	814.1
52.5°	771.7	766.4	766.4	754.5	754.5
55°	714.8	705.5	705.5	694.9	694.9
57.5°	655.2	643.3	644.6	635.4	634.0
60°	593.0	579.8	581.1	573.2	571.8
62.5°	532.1	516.2	520.2	510.9	510.9
65°	463.3	452.7	454.0	450.1	450.1
67.5°	399.8	389.2	395.8	391.8	391.8
70°	328.3	321.7	330.9	330.9	329.6
72.5°	262.1	263.4	275.3	275.3	276.7
75°	199.9	209.1	221.1	222.4	222.4
77.5°	143.0	158.8	172.1	172.1	172.1
80°	95.3	113.8	125.8	128.4	127.1
82.5°	56.9	76.8	86.0	88.7	87.4
85°	29.1	45.0	52.9	54.3	52.9
87.5°	10.6	22.5	26.5	26.5	23.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)