

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: P688681

Luminaire Tested: SQ4R-PC3-100D-93050-1-UNV-STD-W-4_4500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688681
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-93050-1-UNV-STD-W-4_4500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 4500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4158.2 lumens
Efficiency: N/A
Efficacy: 89.6 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

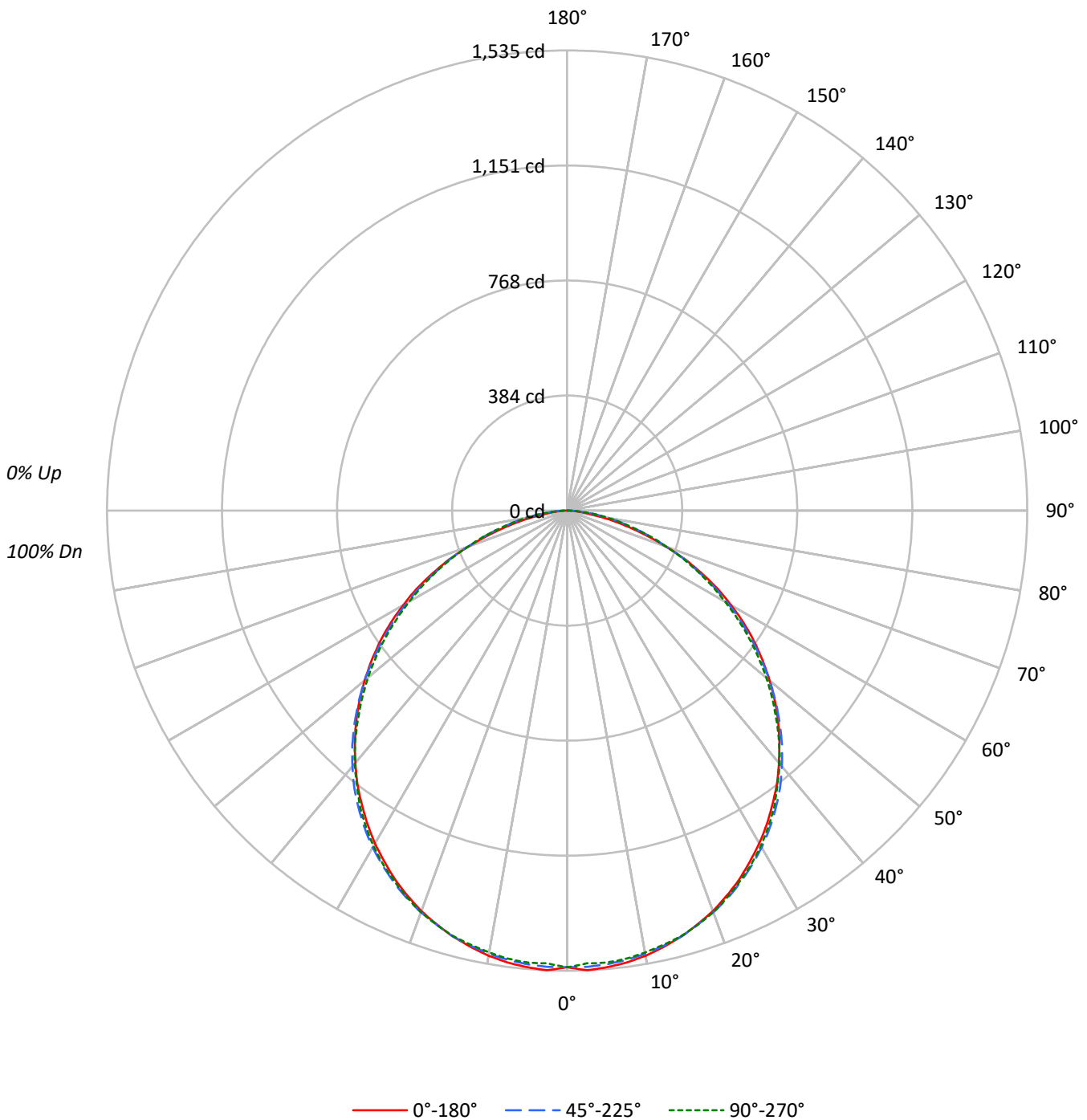
Input Watts (W): 46.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	88	87	85				85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71				71
3	91	80	72	66	88	79	71	65	76	70	64	73	68	63	71	66	62	60				60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51				51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44				44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39				39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34				34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31				31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28				28
10	54	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25				25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14665	14665	14665
5°	14776	14681	14627
10°	14740	14672	14630
15°	14662	14662	14648
20°	14567	14610	14610
25°	14429	14534	14488
30°	14253	14426	14363
35°	14041	14256	14157
40°	13809	14004	13862
45°	13558	13655	13442
50°	13204	13204	12993
55°	12785	12619	12429
60°	12167	11923	11732
65°	11247	11021	10925
70°	9846	9925	9886
75°	7923	8764	8816
80°	5633	7429	7507
85°	3424	6230	6230

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 13655 cd/sqm

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CATALOG NUMBER: SQ4R-PC3-100D-93050-1-UNV-STD-W-4_4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.2	3.5
10°-20°	413.9	10.0
20°-30°	626.8	15.1
30°-40°	751.6	18.1
40°-50°	766.3	18.4
50°-60°	668.9	16.1
60°-70°	478.9	11.5
70°-80°	246.0	5.9
80°-90°	61.5	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°	1185.0	28.5
0°-40°	1936.6	46.6
0°-60°	3371.8	81.1
0°-90°	4158.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4158.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1523	1523	1523	1523	1523	
5°	1529	1514	1519	1515	1514	145
15°	1471	1458	1471	1471	1470	415
25°	1358	1348	1368	1364	1364	625
35°	1195	1192	1213	1205	1205	748
45°	996	993	1003	990	987	767
55°	762	752	752	740	740	679
65°	494	482	484	480	480	489
75°	213	223	236	237	237	229
85°	31	48	56	58	56	42
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1523.3	1523.3	1523.3	1523.3	1523.3
2.5°	1534.6	1517.7	1523.3	1519.1	1512.0
5°	1529.0	1513.5	1519.1	1514.9	1513.5
7.5°	1520.5	1505.0	1512.0	1509.2	1507.8
10°	1507.8	1492.3	1500.8	1497.9	1496.5
12.5°	1490.9	1476.8	1486.7	1483.8	1483.8
15°	1471.1	1458.4	1471.1	1471.1	1469.7
17.5°	1447.2	1435.9	1448.6	1450.0	1448.6
20°	1421.8	1409.1	1426.0	1424.6	1426.0
22.5°	1390.7	1380.9	1399.2	1395.0	1396.4
25°	1358.3	1348.4	1368.2	1363.9	1363.9
27.5°	1320.2	1313.2	1334.3	1330.1	1330.1
30°	1282.1	1275.1	1297.7	1292.0	1292.0
32.5°	1239.8	1235.6	1256.7	1249.7	1249.7
35°	1194.7	1191.9	1213.0	1204.6	1204.6
37.5°	1149.6	1146.7	1166.5	1156.6	1152.4
40°	1098.8	1097.4	1114.3	1103.0	1103.0
42.5°	1048.0	1046.6	1060.7	1046.6	1046.6
45°	995.8	993.0	1002.9	990.2	987.3
47.5°	939.4	936.6	943.6	929.5	928.1
50°	881.6	878.7	881.6	868.9	867.5
52.5°	822.3	816.7	816.7	804.0	804.0
55°	761.7	751.8	751.8	740.5	740.5
57.5°	698.2	685.5	686.9	677.0	675.6
60°	631.9	617.8	619.2	610.7	609.3
62.5°	567.0	550.1	554.3	544.4	544.4
65°	493.7	482.4	483.8	479.6	479.6
67.5°	426.0	414.7	421.7	417.5	417.5
70°	349.8	342.7	352.6	352.6	351.2
72.5°	279.3	280.7	293.4	293.4	294.8
75°	213.0	222.9	235.6	237.0	237.0
77.5°	152.3	169.3	183.4	183.4	183.4
80°	101.6	121.3	134.0	136.8	135.4
82.5°	60.7	81.8	91.7	94.5	93.1
85°	31.0	48.0	56.4	57.8	56.4
87.5°	11.3	24.0	28.2	28.2	25.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)