

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: P688747

Luminaire Tested: SQ4R-PH1-075D-93050-1-UNV-STD-W-4_5000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688747
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-36)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PH1-075D-93050-1-UNV-STD-W-4_5000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
750 LUMENS PER FOOT
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3035.8 lumens
Efficiency: N/A
Efficacy: 92.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.22 / 1.28
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

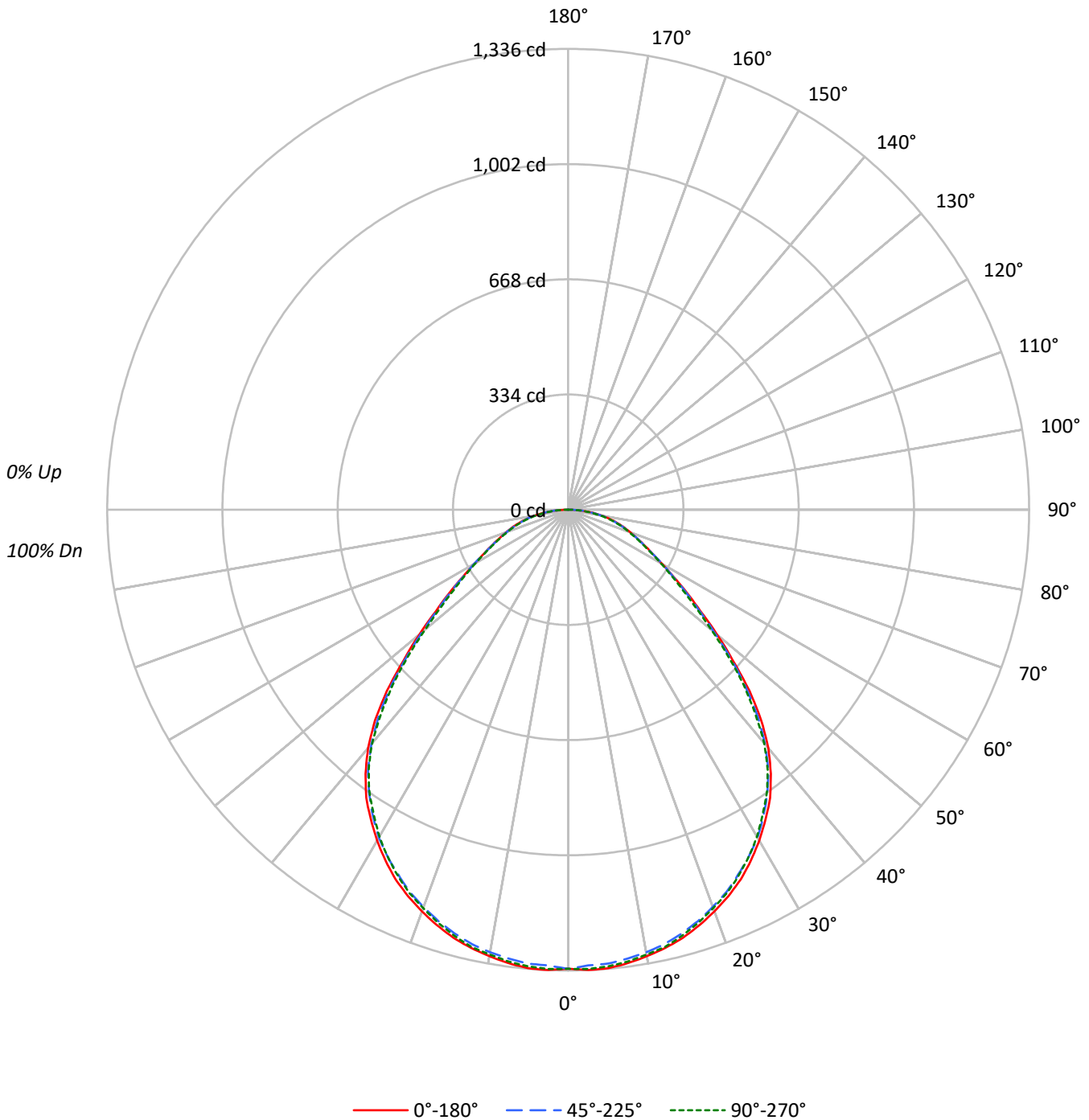
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	58	47	39	34	45	39	34	44	38	34	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12813	12813	12813
5°	12894	12766	12846
10°	12850	12737	12801
15°	12807	12675	12741
20°	12693	12558	12591
25°	12567	12392	12427
30°	12311	12202	12165
35°	11991	11819	11799
40°	11336	11151	11110
45°	10112	9910	9799
50°	8441	8269	8097
55°	7033	6951	6784
60°	6042	6075	5948
65°	5540	5501	5426
70°	5365	5320	5227
75°	5438	5315	5196
80°	5467	5372	5195
85°	5258	5258	4904

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10112 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.2	4.2
10°-20°	360.6	11.9
20°-30°	540.2	17.8
30°-40°	628.6	20.7
40°-50°	559.1	18.4
50°-60°	375.4	12.4
60°-70°	242.6	8.0
70°-80°	151.2	5.0
80°-90°	51.8	1.7
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°	1027.1	33.8
0°-40°	1655.7	54.5
0°-60°	2590.1	85.3
0°-90°	3035.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3035.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1331	1331	1331	1331	1331	
5°	1334	1331	1321	1331	1329	127
15°	1285	1282	1272	1280	1278	362
25°	1183	1178	1167	1173	1170	544
35°	1020	1015	1006	1006	1004	634
45°	743	739	728	718	720	568
55°	419	419	414	408	404	380
65°	243	245	242	240	238	244
75°	146	145	143	143	140	154
85°	48	49	48	46	44	53
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1330.9	1330.9	1330.9	1330.9	1330.9
2.5°	1335.8	1332.5	1322.7	1334.2	1332.5
5°	1334.2	1330.9	1321.0	1330.9	1329.2
7.5°	1326.0	1324.3	1312.8	1324.3	1321.0
10°	1314.5	1314.5	1302.9	1312.8	1309.5
12.5°	1301.3	1299.7	1289.8	1299.7	1298.0
15°	1284.9	1281.6	1271.7	1279.9	1278.3
17.5°	1263.5	1261.9	1250.4	1258.6	1255.3
20°	1238.9	1235.6	1225.7	1232.3	1229.0
22.5°	1212.6	1209.3	1199.4	1204.4	1202.7
25°	1183.0	1178.1	1166.6	1173.1	1169.9
27.5°	1146.9	1145.2	1133.7	1137.0	1133.7
30°	1107.4	1105.8	1097.6	1097.6	1094.3
32.5°	1064.7	1066.3	1053.2	1054.8	1048.3
35°	1020.3	1015.4	1005.6	1005.6	1003.9
37.5°	964.5	961.2	953.0	951.3	949.7
40°	902.0	898.8	887.3	884.0	884.0
42.5°	828.1	824.8	813.3	808.4	801.8
45°	742.7	739.4	727.9	718.0	719.7
47.5°	647.4	650.7	639.2	630.9	629.3
50°	563.6	561.9	552.1	547.1	540.6
52.5°	483.1	484.7	476.5	473.2	465.0
55°	419.0	419.0	414.1	407.5	404.2
57.5°	361.5	364.8	359.8	356.5	353.3
60°	313.8	315.5	315.5	308.9	308.9
62.5°	274.4	276.0	274.4	271.1	271.1
65°	243.2	244.8	241.5	239.9	238.2
67.5°	215.2	216.9	215.2	213.6	210.3
70°	190.6	190.6	189.0	189.0	185.7
72.5°	169.2	167.6	165.9	165.9	164.3
75°	146.2	144.6	142.9	142.9	139.7
77.5°	123.2	121.6	121.6	118.3	116.7
80°	98.6	98.6	96.9	95.3	93.7
82.5°	75.6	73.9	72.3	70.7	69.0
85°	47.6	49.3	47.6	46.0	44.4
87.5°	21.4	23.0	23.0	23.0	21.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)