

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: P688517

Luminaire Tested: SQ4R-PH1-100D-940-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688517
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-PH1-100D-940-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3075.1 lumens
Efficiency: N/A
Efficacy: 83.1 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

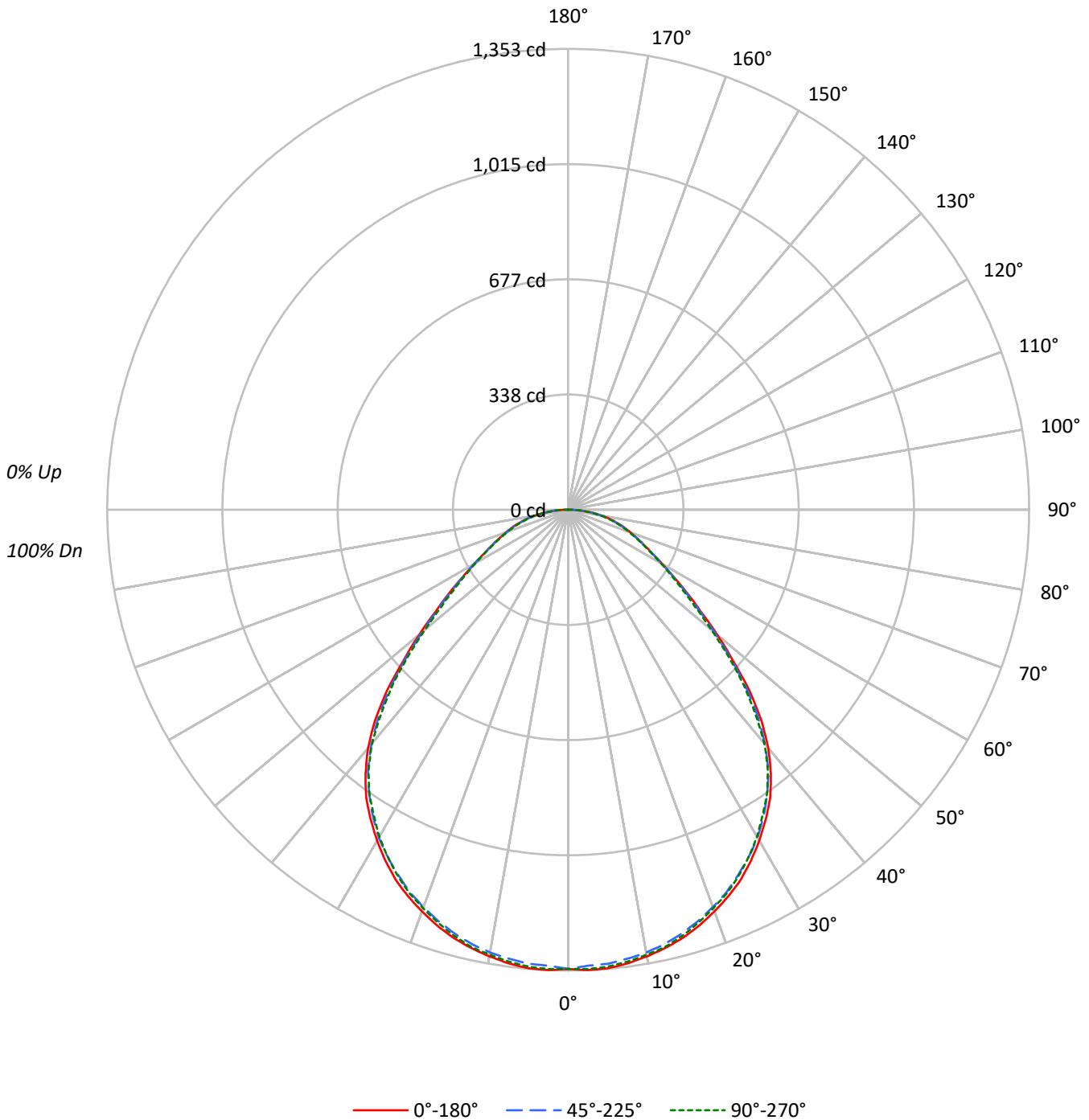
Input Watts (W): 37
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	12979	12979	12979
5°	13060	12932	13012
10°	13017	12902	12968
15°	12972	12839	12905
20°	12857	12720	12754
25°	12729	12553	12588
30°	12470	12360	12322
35°	12147	11971	11951
40°	11483	11295	11253
45°	10243	10038	9925
50°	8551	8375	8202
55°	7123	7040	6872
60°	6121	6152	6025
65°	5611	5574	5497
70°	5435	5388	5295
75°	5509	5386	5263
80°	5539	5444	5261
85°	5335	5335	4960

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10243 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.8	4.2
10°-20°	365.3	11.9
20°-30°	547.2	17.8
30°-40°	636.7	20.7
40°-50°	566.3	18.4
50°-60°	380.2	12.4
60°-70°	245.8	8.0
70°-80°	153.2	5.0
80°-90°	52.5	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°	1040.3	33.8
0°-40°	1677.1	54.5
0°-60°	2623.6	85.3
0°-90°	3075.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3075.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1348	1348	1348	1348	1348	
5°	1351	1348	1338	1348	1346	128
15°	1302	1298	1288	1296	1295	367
25°	1198	1193	1182	1188	1185	551
35°	1034	1028	1019	1019	1017	642
45°	752	749	737	727	729	575
55°	424	424	419	413	409	385
65°	246	248	245	243	241	247
75°	148	146	145	145	142	156
85°	48	50	48	47	45	53
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1348.1	1348.1	1348.1	1348.1	1348.1
2.5°	1353.1	1349.8	1339.8	1351.4	1349.8
5°	1351.4	1348.1	1338.1	1348.1	1346.4
7.5°	1343.1	1341.4	1329.8	1341.4	1338.1
10°	1331.5	1331.5	1319.8	1329.8	1326.5
12.5°	1318.1	1316.5	1306.5	1316.5	1314.8
15°	1301.5	1298.2	1288.2	1296.5	1294.8
17.5°	1279.9	1278.2	1266.5	1274.9	1271.5
20°	1254.9	1251.6	1241.6	1248.2	1244.9
22.5°	1228.3	1224.9	1214.9	1219.9	1218.3
25°	1198.3	1193.3	1181.7	1188.3	1185.0
27.5°	1161.7	1160.0	1148.4	1151.7	1148.4
30°	1121.7	1120.1	1111.8	1111.8	1108.4
32.5°	1078.5	1080.1	1066.8	1068.5	1061.8
35°	1033.5	1028.5	1018.6	1018.6	1016.9
37.5°	977.0	973.6	965.3	963.6	962.0
40°	913.7	910.4	898.7	895.4	895.4
42.5°	838.8	835.5	823.8	818.8	812.2
45°	752.3	748.9	737.3	727.3	729.0
47.5°	655.7	659.1	647.4	639.1	637.4
50°	570.9	569.2	559.2	554.2	547.6
52.5°	489.3	491.0	482.7	479.3	471.0
55°	424.4	424.4	419.4	412.7	409.4
57.5°	366.1	369.5	364.5	361.2	357.8
60°	317.9	319.5	319.5	312.9	312.9
62.5°	277.9	279.6	277.9	274.6	274.6
65°	246.3	248.0	244.7	243.0	241.3
67.5°	218.0	219.7	218.0	216.4	213.0
70°	193.1	193.1	191.4	191.4	188.1
72.5°	171.4	169.8	168.1	168.1	166.4
75°	148.1	146.5	144.8	144.8	141.5
77.5°	124.8	123.2	123.2	119.8	118.2
80°	99.9	99.9	98.2	96.5	94.9
82.5°	76.6	74.9	73.2	71.6	69.9
85°	48.3	49.9	48.3	46.6	44.9
87.5°	21.6	23.3	23.3	23.3	21.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)