

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: P688746

Luminaire Tested: SQ4R-PH1-075D-93050-1-UNV-STD-W-4_4500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688746
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_4500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
750 LUMENS PER FOOT
Light Source: 4500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3009.8 lumens
Efficiency: N/A
Efficacy: 91.2 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

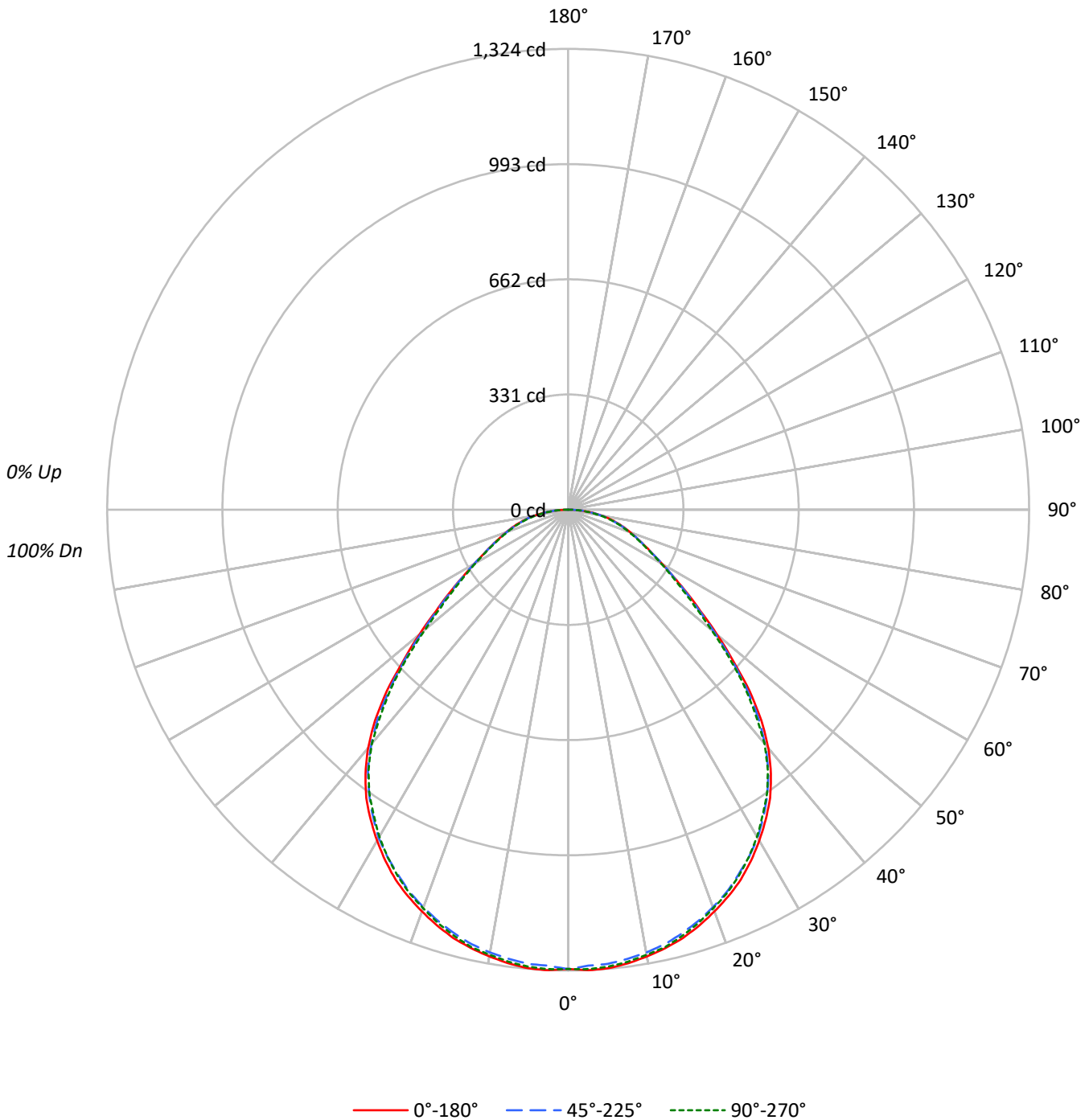
Input Watts (W): 33
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	79	76	74				74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66	64				64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55				55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49				49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43				43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39				39
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35				35
9	60	47	39	34	58	47	39	34	45	39	34	44	38	34	43	38	33	32				32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29				29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12703	12703	12703
5°	12783	12657	12736
10°	12740	12628	12692
15°	12697	12566	12632
20°	12584	12450	12484
25°	12459	12286	12320
30°	12205	12097	12061
35°	11889	11716	11698
40°	11239	11056	11014
45°	10025	9825	9714
50°	8368	8197	8026
55°	6972	6890	6726
60°	5990	6023	5898
65°	5492	5456	5381
70°	5320	5272	5182
75°	5394	5271	5152
80°	5417	5328	5151
85°	5214	5214	4860

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10025 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.1	4.2
10°-20°	357.5	11.9
20°-30°	535.6	17.8
30°-40°	623.2	20.7
40°-50°	554.3	18.4
50°-60°	372.2	12.4
60°-70°	240.6	8.0
70°-80°	150.0	5.0
80°-90°	51.4	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°	1018.3	33.8
0°-40°	1641.5	54.5
0°-60°	2567.9	85.3
0°-90°	3009.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3009.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1320	1320	1320	1320	1320	
5°	1323	1320	1310	1320	1318	126
15°	1274	1271	1261	1269	1267	359
25°	1173	1168	1157	1163	1160	539
35°	1012	1007	997	997	995	629
45°	736	733	722	712	714	563
55°	415	415	410	404	401	376
65°	241	243	240	238	236	242
75°	145	143	142	142	138	153
85°	47	49	47	46	44	52
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1319.5	1319.5	1319.5	1319.5	1319.5
2.5°	1324.4	1321.1	1311.3	1322.7	1321.1
5°	1322.7	1319.5	1309.7	1319.5	1317.9
7.5°	1314.6	1313.0	1301.6	1313.0	1309.7
10°	1303.2	1303.2	1291.8	1301.6	1298.3
12.5°	1290.2	1288.5	1278.8	1288.5	1286.9
15°	1273.9	1270.6	1260.8	1269.0	1267.4
17.5°	1252.7	1251.1	1239.7	1247.8	1244.6
20°	1228.3	1225.0	1215.2	1221.7	1218.5
22.5°	1202.2	1198.9	1189.2	1194.1	1192.4
25°	1172.9	1168.0	1156.6	1163.1	1159.8
27.5°	1137.0	1135.4	1124.0	1127.3	1124.0
30°	1097.9	1096.3	1088.2	1088.2	1084.9
32.5°	1055.6	1057.2	1044.2	1045.8	1039.3
35°	1011.6	1006.7	996.9	996.9	995.3
37.5°	956.2	953.0	944.8	943.2	941.6
40°	894.3	891.1	879.7	876.4	876.4
42.5°	821.0	817.8	806.4	801.5	795.0
45°	736.3	733.0	721.6	711.9	713.5
47.5°	641.8	645.1	633.7	625.5	623.9
50°	558.7	557.1	547.3	542.5	535.9
52.5°	478.9	480.6	472.4	469.2	461.0
55°	415.4	415.4	410.5	404.0	400.7
57.5°	358.4	361.6	356.8	353.5	350.2
60°	311.1	312.8	312.8	306.3	306.3
62.5°	272.0	273.7	272.0	268.8	268.8
65°	241.1	242.7	239.5	237.8	236.2
67.5°	213.4	215.0	213.4	211.8	208.5
70°	189.0	189.0	187.3	187.3	184.1
72.5°	167.8	166.2	164.5	164.5	162.9
75°	145.0	143.4	141.7	141.7	138.5
77.5°	122.2	120.5	120.5	117.3	115.7
80°	97.7	97.7	96.1	94.5	92.9
82.5°	74.9	73.3	71.7	70.0	68.4
85°	47.2	48.9	47.2	45.6	44.0
87.5°	21.2	22.8	22.8	22.8	21.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)