

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: P688740

Luminaire Tested: SQ4R-PH1-075D-92765-1-UNV-STD-W-4_5000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688740
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-92765-1-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: 2971.8 lumens
Efficiency: N/A
Efficacy: 90.3 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

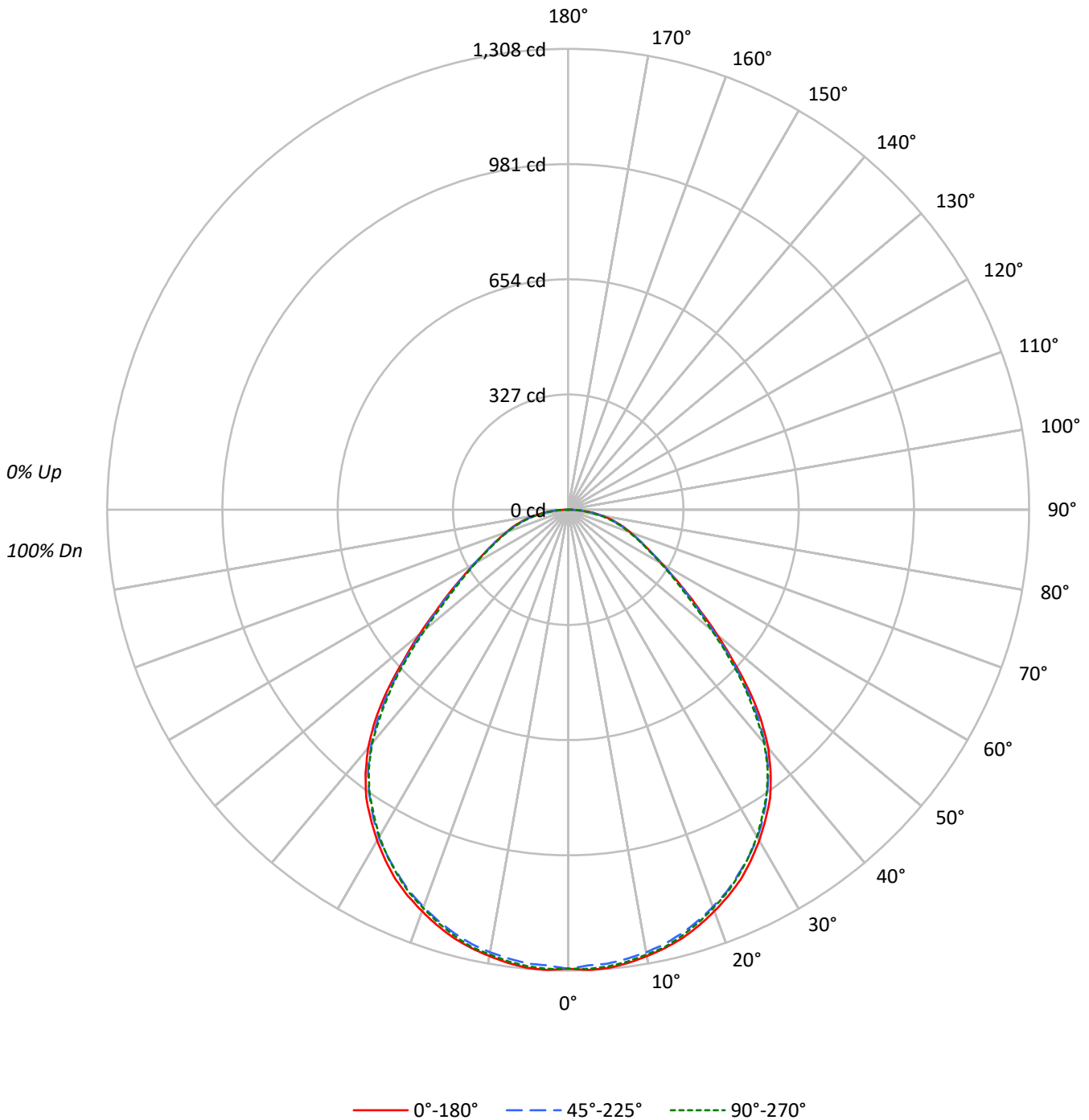
Input Watts (W): 32.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	12543	12543	12543
5°	12621	12498	12575
10°	12579	12469	12532
15°	12536	12408	12472
20°	12424	12293	12326
25°	12302	12131	12165
30°	12052	11944	11908
35°	11739	11568	11549
40°	11097	10915	10875
45°	9898	9701	9592
50°	8263	8094	7926
55°	6883	6803	6642
60°	5915	5946	5823
65°	5422	5385	5312
70°	5253	5207	5115
75°	5323	5204	5085
80°	5350	5261	5084
85°	5147	5147	4794

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9898 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.6	4.2
10°-20°	353.0	11.9
20°-30°	528.8	17.8
30°-40°	615.3	20.7
40°-50°	547.3	18.4
50°-60°	367.5	12.4
60°-70°	237.5	8.0
70°-80°	148.0	5.0
80°-90°	50.7	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°	1005.4	33.8
0°-40°	1620.7	54.5
0°-60°	2535.5	85.3
0°-90°	2971.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2971.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1303	1303	1303	1303	1303	
5°	1306	1303	1293	1303	1301	124
15°	1258	1255	1245	1253	1251	355
25°	1158	1153	1142	1148	1145	532
35°	999	994	984	984	983	621
45°	727	724	712	703	704	556
55°	410	410	405	399	396	372
65°	238	240	236	235	233	239
75°	143	142	140	140	137	151
85°	47	48	47	45	43	52
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1302.8	1302.8	1302.8	1302.8	1302.8
2.5°	1307.6	1304.4	1294.8	1306.0	1304.4
5°	1306.0	1302.8	1293.2	1302.8	1301.2
7.5°	1298.0	1296.4	1285.1	1296.4	1293.2
10°	1286.7	1286.7	1275.5	1285.1	1281.9
12.5°	1273.9	1272.2	1262.6	1272.2	1270.6
15°	1257.8	1254.6	1244.9	1252.9	1251.3
17.5°	1236.9	1235.3	1224.0	1232.0	1228.8
20°	1212.7	1209.5	1199.9	1206.3	1203.1
22.5°	1187.0	1183.8	1174.1	1179.0	1177.4
25°	1158.1	1153.2	1142.0	1148.4	1145.2
27.5°	1122.7	1121.1	1109.8	1113.0	1109.8
30°	1084.1	1082.5	1074.4	1074.4	1071.2
32.5°	1042.2	1043.9	1031.0	1032.6	1026.2
35°	998.8	994.0	984.3	984.3	982.7
37.5°	944.1	940.9	932.9	931.3	929.7
40°	883.0	879.8	868.5	865.3	865.3
42.5°	810.6	807.4	796.2	791.3	784.9
45°	727.0	723.8	712.5	702.9	704.5
47.5°	633.7	636.9	625.7	617.6	616.0
50°	551.7	550.1	540.4	535.6	529.2
52.5°	472.9	474.5	466.4	463.2	455.2
55°	410.1	410.1	405.3	398.9	395.7
57.5°	353.8	357.1	352.2	349.0	345.8
60°	307.2	308.8	308.8	302.4	302.4
62.5°	268.6	270.2	268.6	265.4	265.4
65°	238.0	239.7	236.4	234.8	233.2
67.5°	210.7	212.3	210.7	209.1	205.9
70°	186.6	186.6	185.0	185.0	181.7
72.5°	165.7	164.1	162.4	162.4	160.8
75°	143.1	141.5	139.9	139.9	136.7
77.5°	120.6	119.0	119.0	115.8	114.2
80°	96.5	96.5	94.9	93.3	91.7
82.5°	74.0	72.4	70.8	69.2	67.6
85°	46.6	48.3	46.6	45.0	43.4
87.5°	20.9	22.5	22.5	22.5	20.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)