

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: P688744

Luminaire Tested: SQ4R-PH1-075D-93050-1-UNV-STD-W-4_3500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688744
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_3500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
750 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2924.5 lumens
Efficiency: N/A
Efficacy: 88.6 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

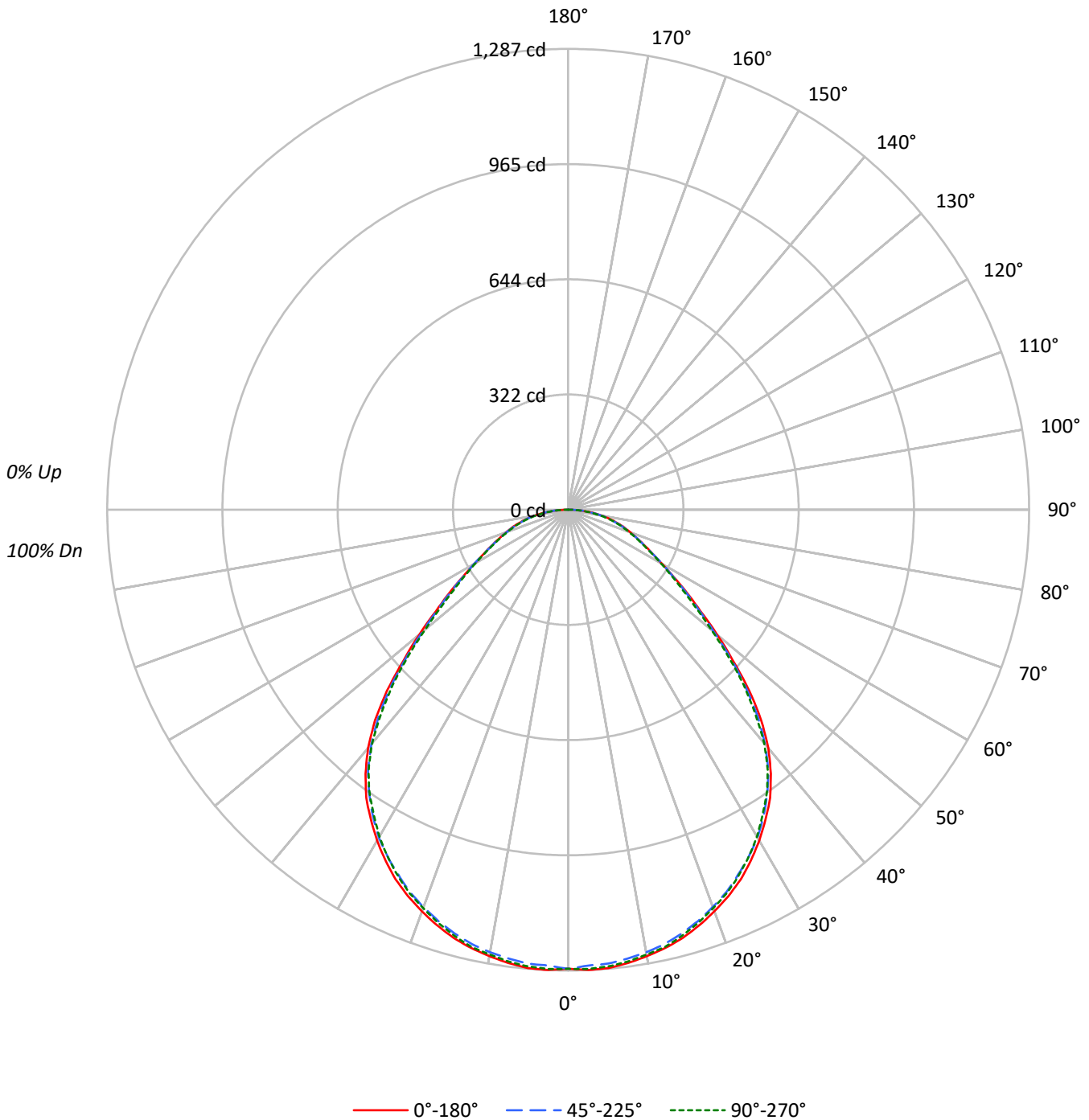
Input Watts (W): 33
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P688744

CATALOG NUMBER: SQ4R-PH1-075D-93050-1-UNV-STD-W-4_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P688744

CATALOG NUMBER: SQ4R-PH1-075D-93050-1-UNV-STD-W-4_3500K

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°	12343	12343	12343
5°	12420	12299	12375
10°	12378	12271	12332
15°	12337	12211	12273
20°	12227	12098	12129
25°	12106	11938	11972
30°	11859	11754	11718
35°	11552	11385	11366
40°	10921	10742	10701
45°	9740	9547	9439
50°	8131	7965	7799
55°	6774	6695	6536
60°	5821	5851	5730
65°	5337	5301	5228
70°	5168	5123	5036
75°	5241	5122	5003
80°	5267	5178	5001
85°	5070	5070	4717

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9740 cd/sqm

TEST NUMBER: P688744

CATALOG NUMBER: SQ4R-PH1-075D-93050-1-UNV-STD-W-4_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.6	4.2
10°-20°	347.4	11.9
20°-30°	520.4	17.8
30°-40°	605.5	20.7
40°-50°	538.6	18.4
50°-60°	361.6	12.4
60°-70°	233.7	8.0
70°-80°	145.7	5.0
80°-90°	49.9	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°	989.4	33.8
0°-40°	1594.9	54.5
0°-60°	2495.1	85.3
0°-90°	2924.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2924.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1282	1282	1282	1282	1282	
5°	1285	1282	1273	1282	1280	122
15°	1238	1235	1225	1233	1231	349
25°	1140	1135	1124	1130	1127	524
35°	983	978	969	969	967	611
45°	715	712	701	692	693	547
55°	404	404	399	392	389	366
65°	234	236	233	231	230	235
75°	141	139	138	138	134	148
85°	46	48	46	44	43	51
90°	0	0	0	0	0	

TEST NUMBER: P688744

CATALOG NUMBER: SQ4R-PH1-075D-93050-1-UNV-STD-W-4_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1282.1	1282.1	1282.1	1282.1	1282.1
2.5°	1286.8	1283.7	1274.2	1285.2	1283.7
5°	1285.2	1282.1	1272.6	1282.1	1280.5
7.5°	1277.3	1275.7	1264.7	1275.7	1272.6
10°	1266.2	1266.2	1255.2	1264.7	1261.5
12.5°	1253.6	1252.0	1242.5	1252.0	1250.4
15°	1237.8	1234.6	1225.1	1233.0	1231.4
17.5°	1217.2	1215.6	1204.5	1212.4	1209.3
20°	1193.4	1190.3	1180.8	1187.1	1183.9
22.5°	1168.1	1164.9	1155.4	1160.2	1158.6
25°	1139.6	1134.9	1123.8	1130.1	1127.0
27.5°	1104.8	1103.2	1092.1	1095.3	1092.1
30°	1066.8	1065.2	1057.3	1057.3	1054.1
32.5°	1025.7	1027.2	1014.6	1016.2	1009.8
35°	982.9	978.2	968.7	968.7	967.1
37.5°	929.1	925.9	918.0	916.4	914.9
40°	869.0	865.8	854.7	851.5	851.5
42.5°	797.7	794.6	783.5	778.7	772.4
45°	715.4	712.3	701.2	691.7	693.3
47.5°	623.6	626.8	615.7	607.8	606.2
50°	542.9	541.3	531.8	527.1	520.7
52.5°	465.3	466.9	459.0	455.8	447.9
55°	403.6	403.6	398.9	392.5	389.4
57.5°	348.2	351.4	346.6	343.5	340.3
60°	302.3	303.9	303.9	297.6	297.6
62.5°	264.3	265.9	264.3	261.2	261.2
65°	234.3	235.8	232.7	231.1	229.5
67.5°	207.3	208.9	207.3	205.8	202.6
70°	183.6	183.6	182.0	182.0	178.9
72.5°	163.0	161.4	159.9	159.9	158.3
75°	140.9	139.3	137.7	137.7	134.5
77.5°	118.7	117.1	117.1	114.0	112.4
80°	95.0	95.0	93.4	91.8	90.2
82.5°	72.8	71.2	69.6	68.1	66.5
85°	45.9	47.5	45.9	44.3	42.7
87.5°	20.6	22.2	22.2	22.2	20.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)