

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: P688739

Luminaire Tested: SQ4R-PH1-075D-92765-1-UNV-STD-W-4_4500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688739
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_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: 2914.6 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

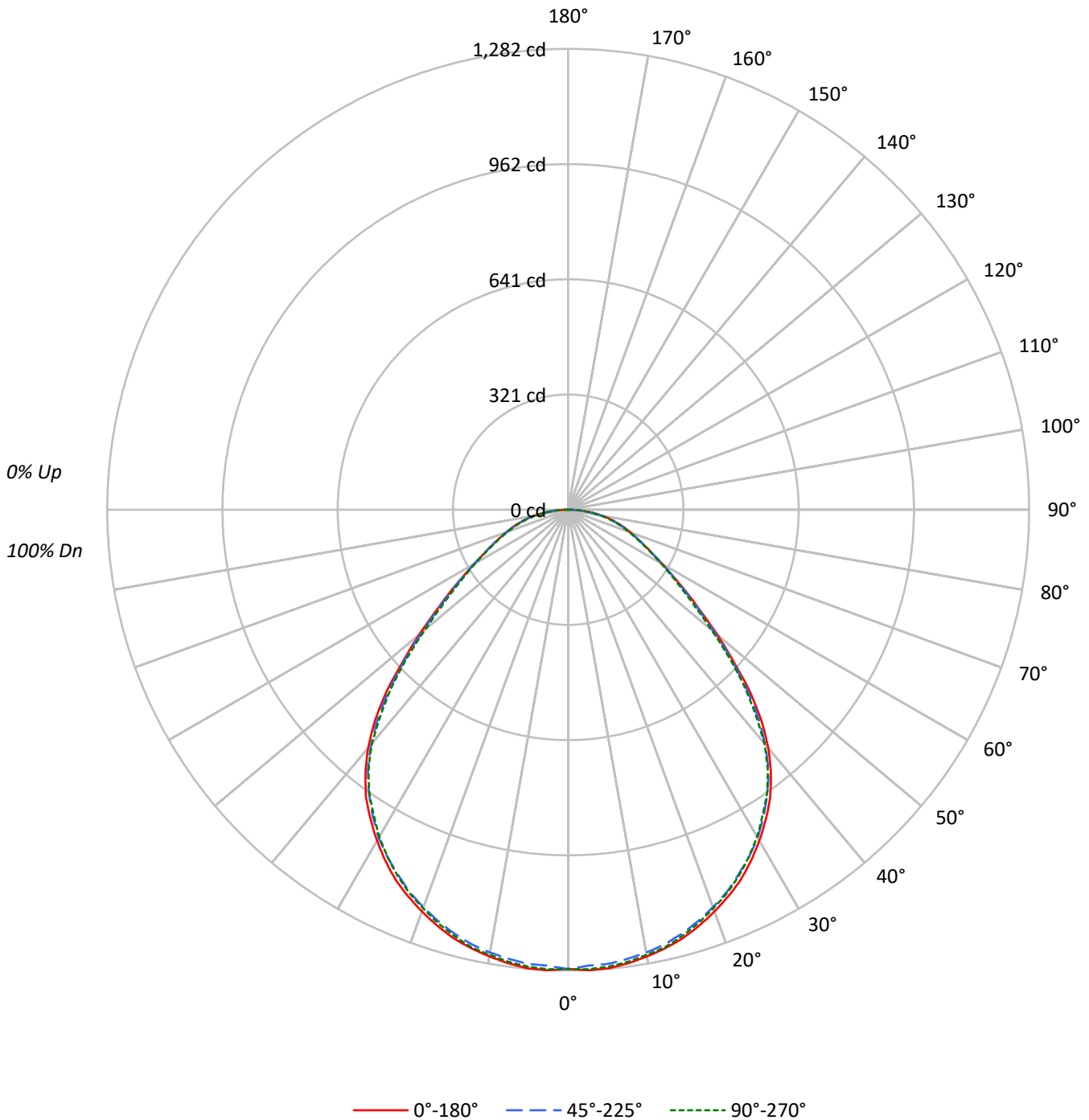
Input Watts (W): 32.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	12301	12301	12301
5°	12379	12257	12332
10°	12336	12229	12290
15°	12295	12169	12231
20°	12186	12057	12088
25°	12065	11897	11930
30°	11819	11714	11679
35°	11513	11346	11327
40°	10884	10705	10666
45°	9708	9514	9407
50°	8104	7938	7773
55°	6751	6672	6512
60°	5801	5832	5711
65°	5319	5283	5210
70°	5151	5106	5016
75°	5222	5103	4988
80°	5245	5162	4984
85°	5048	5048	4706

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9708 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.2	4.2
10°-20°	346.2	11.9
20°-30°	518.6	17.8
30°-40°	603.5	20.7
40°-50°	536.7	18.4
50°-60°	360.4	12.4
60°-70°	233.0	8.0
70°-80°	145.2	5.0
80°-90°	49.8	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°	986.0	33.8
0°-40°	1589.5	54.5
0°-60°	2486.6	85.3
0°-90°	2914.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2914.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1278	1278	1278	1278	1278	
5°	1281	1278	1268	1278	1276	122
15°	1234	1230	1221	1229	1227	348
25°	1136	1131	1120	1126	1123	522
35°	980	975	965	965	964	609
45°	713	710	699	689	691	545
55°	402	402	398	391	388	364
65°	234	235	232	230	229	234
75°	140	139	137	137	134	148
85°	46	47	46	44	43	51
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1277.7	1277.7	1277.7	1277.7	1277.7
2.5°	1282.5	1279.3	1269.8	1280.9	1279.3
5°	1280.9	1277.7	1268.3	1277.7	1276.1
7.5°	1273.0	1271.4	1260.4	1271.4	1268.3
10°	1261.9	1261.9	1250.9	1260.4	1257.2
12.5°	1249.3	1247.7	1238.3	1247.7	1246.2
15°	1233.6	1230.4	1220.9	1228.8	1227.2
17.5°	1213.0	1211.5	1200.4	1208.3	1205.2
20°	1189.4	1186.2	1176.8	1183.1	1179.9
22.5°	1164.1	1161.0	1151.5	1156.3	1154.7
25°	1135.8	1131.0	1120.0	1126.3	1123.1
27.5°	1101.0	1099.5	1088.4	1091.6	1088.4
30°	1063.2	1061.6	1053.7	1053.7	1050.6
32.5°	1022.2	1023.8	1011.1	1012.7	1006.4
35°	979.6	974.9	965.4	965.4	963.8
37.5°	926.0	922.8	914.9	913.3	911.8
40°	866.0	862.9	851.8	848.7	848.7
42.5°	795.0	791.9	780.8	776.1	769.8
45°	713.0	709.8	698.8	689.3	690.9
47.5°	621.5	624.7	613.6	605.7	604.2
50°	541.1	539.5	530.0	525.3	519.0
52.5°	463.8	465.3	457.5	454.3	446.4
55°	402.2	402.2	397.5	391.2	388.0
57.5°	347.0	350.2	345.5	342.3	339.1
60°	301.3	302.9	302.9	296.6	296.6
62.5°	263.4	265.0	263.4	260.3	260.3
65°	233.5	235.0	231.9	230.3	228.7
67.5°	206.6	208.2	206.6	205.1	201.9
70°	183.0	183.0	181.4	181.4	178.2
72.5°	162.5	160.9	159.3	159.3	157.7
75°	140.4	138.8	137.2	137.2	134.1
77.5°	118.3	116.7	116.7	113.6	112.0
80°	94.6	94.6	93.1	91.5	89.9
82.5°	72.6	71.0	69.4	67.8	66.3
85°	45.7	47.3	45.7	44.2	42.6
87.5°	20.5	22.1	22.1	22.1	20.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)