

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: P688736

Luminaire Tested: SQ4R-PH1-075D-92765-1-UNV-STD-W-4_3000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688736
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_3000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
750 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2670.1 lumens
Efficiency: N/A
Efficacy: 81.7 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

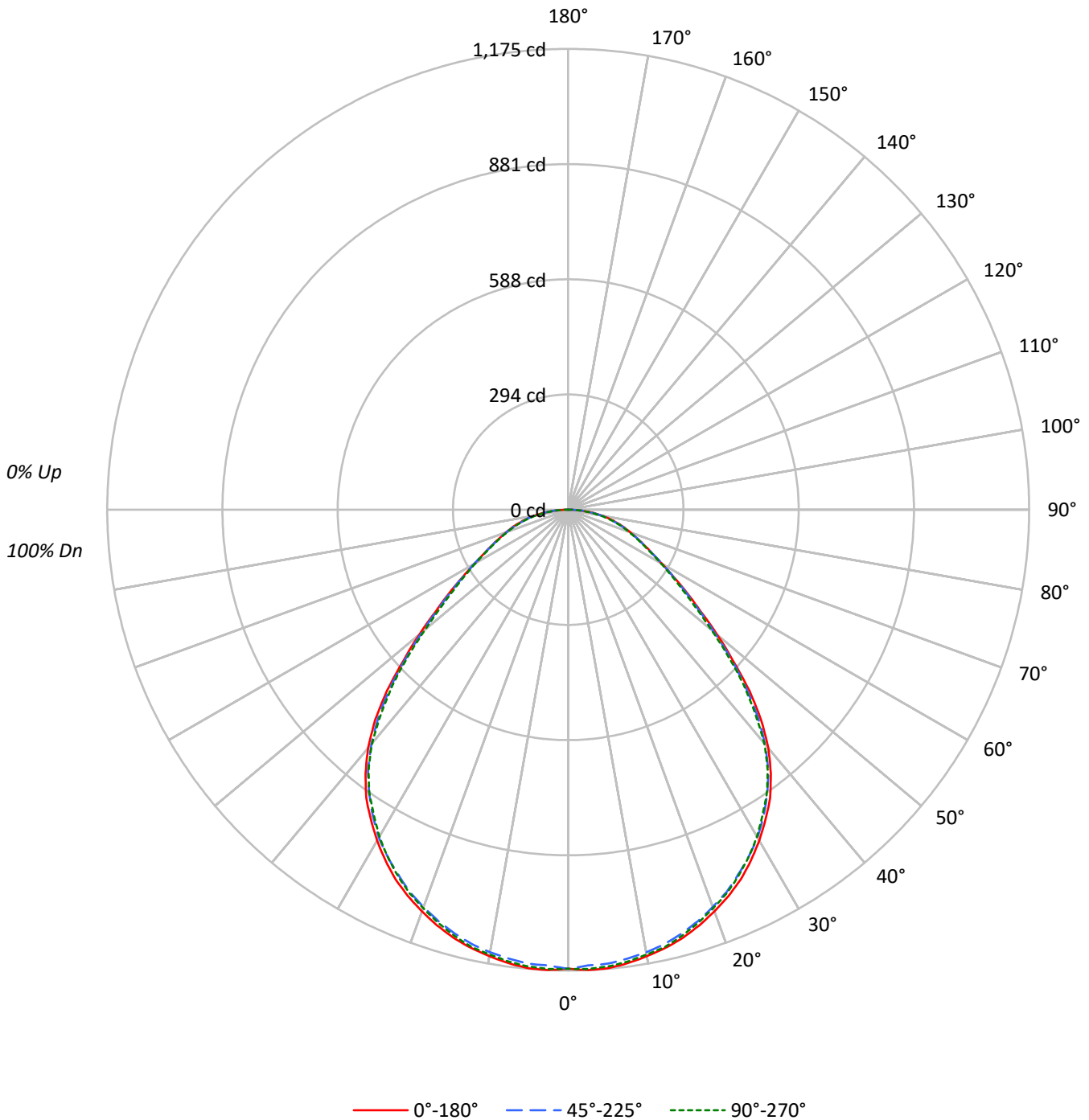
Input Watts (W): 32.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	11269	11269	11269
5°	11340	11229	11298
10°	11302	11203	11259
15°	11264	11148	11206
20°	11163	11044	11074
25°	11053	10899	10930
30°	10828	10731	10699
35°	10547	10394	10378
40°	9971	9807	9771
45°	8893	8716	8617
50°	7424	7273	7120
55°	6185	6113	5967
60°	5314	5343	5231
65°	4873	4839	4772
70°	4718	4678	4597
75°	4784	4676	4568
80°	4807	4729	4568
85°	4628	4628	4308

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8893 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.0	4.2
10°-20°	317.2	11.9
20°-30°	475.1	17.8
30°-40°	552.9	20.7
40°-50°	491.7	18.4
50°-60°	330.2	12.4
60°-70°	213.4	8.0
70°-80°	133.0	5.0
80°-90°	45.6	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°	903.3	33.8
0°-40°	1456.2	54.5
0°-60°	2278.0	85.3
0°-90°	2670.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2670.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1170	1170	1170	1170	1170	
5°	1173	1170	1162	1170	1169	111
15°	1130	1127	1118	1126	1124	319
25°	1040	1036	1026	1032	1029	478
35°	897	893	884	884	883	558
45°	653	650	640	632	633	499
55°	368	368	364	358	356	334
65°	214	215	212	211	210	214
75°	129	127	126	126	123	135
85°	42	43	42	40	39	46
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1170.5	1170.5	1170.5	1170.5	1170.5
2.5°	1174.9	1172.0	1163.3	1173.4	1172.0
5°	1173.4	1170.5	1161.9	1170.5	1169.1
7.5°	1166.2	1164.7	1154.6	1164.7	1161.9
10°	1156.1	1156.1	1146.0	1154.6	1151.7
12.5°	1144.5	1143.1	1134.4	1143.1	1141.6
15°	1130.1	1127.2	1118.5	1125.7	1124.3
17.5°	1111.3	1109.8	1099.7	1106.9	1104.0
20°	1089.6	1086.7	1078.0	1083.8	1080.9
22.5°	1066.5	1063.6	1054.9	1059.3	1057.8
25°	1040.5	1036.1	1026.0	1031.8	1028.9
27.5°	1008.7	1007.2	997.1	1000.0	997.1
30°	974.0	972.5	965.3	965.3	962.4
32.5°	936.4	937.9	926.3	927.7	922.0
35°	897.4	893.1	884.4	884.4	883.0
37.5°	848.3	845.4	838.2	836.7	835.3
40°	793.4	790.5	780.3	777.5	777.5
42.5°	728.3	725.4	715.3	711.0	705.2
45°	653.2	650.3	640.2	631.5	632.9
47.5°	569.4	572.3	562.1	554.9	553.5
50°	495.7	494.2	485.6	481.2	475.4
52.5°	424.9	426.3	419.1	416.2	409.0
55°	368.5	368.5	364.2	358.4	355.5
57.5°	317.9	320.8	316.5	313.6	310.7
60°	276.0	277.5	277.5	271.7	271.7
62.5°	241.3	242.8	241.3	238.4	238.4
65°	213.9	215.3	212.4	211.0	209.5
67.5°	189.3	190.8	189.3	187.9	185.0
70°	167.6	167.6	166.2	166.2	163.3
72.5°	148.8	147.4	146.0	146.0	144.5
75°	128.6	127.2	125.7	125.7	122.8
77.5°	108.4	106.9	106.9	104.0	102.6
80°	86.7	86.7	85.3	83.8	82.4
82.5°	66.5	65.0	63.6	62.1	60.7
85°	41.9	43.4	41.9	40.5	39.0
87.5°	18.8	20.2	20.2	20.2	18.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)