

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: P688980

Luminaire Tested: SQ4R-PW1-075D-93050-1-UNV-STD-W-4_4500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688980
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-35)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PW1-075D-93050-1-UNV-STD-W-4_4500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES 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: 3043.1 lumens
Efficiency: N/A
Efficacy: 92.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

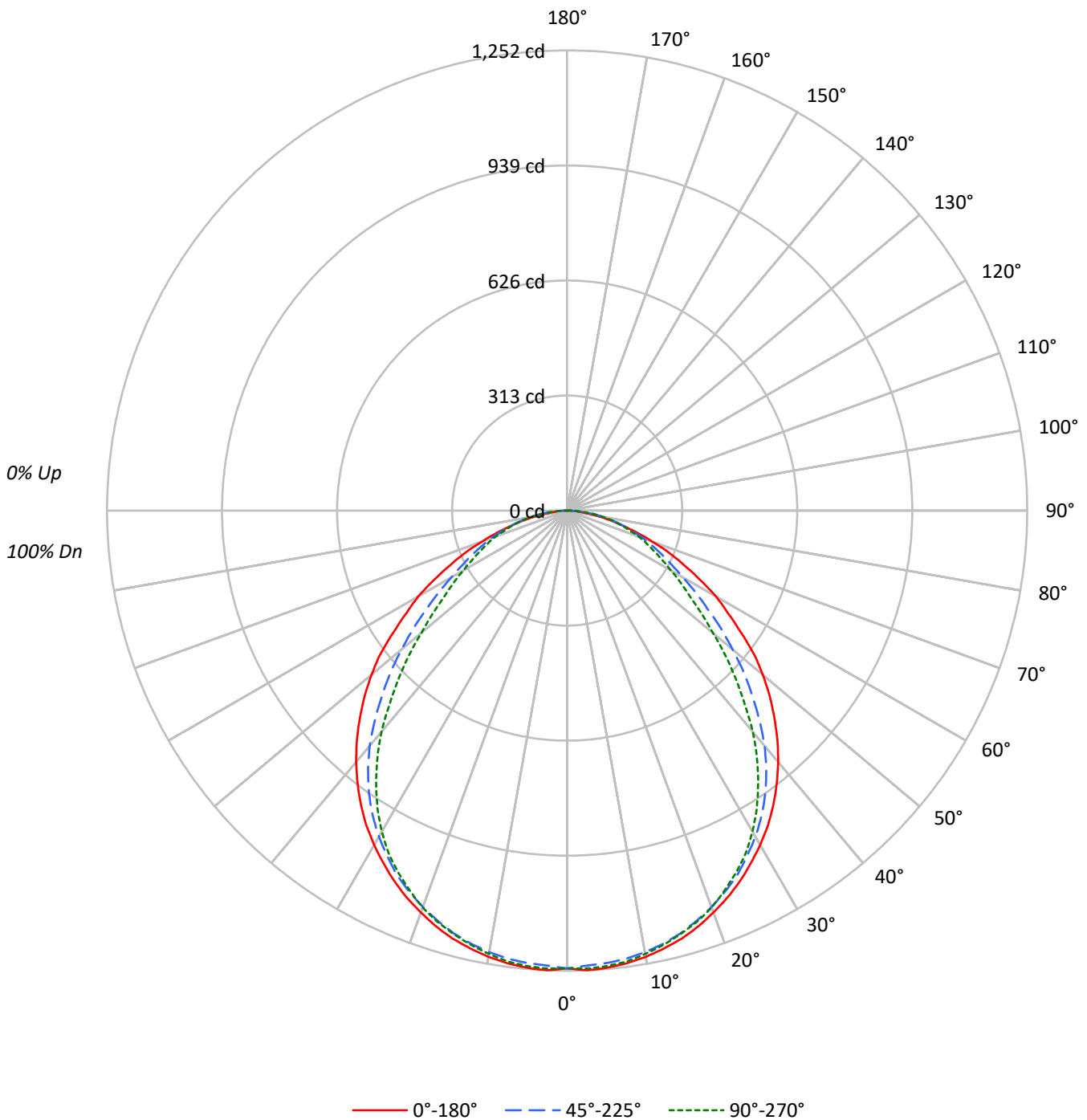
Input Watts (W): 33
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20										
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	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	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62					62			
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	54					54			
5	78	66	57	51	76	65	57	50	63	55	50	61	54	49	59	53	49	47					47			
6	72	59	51	45	70	59	50	44	57	49	44	55	49	44	54	48	43	41					41			
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37					37			
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35	33					33			
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30					30			
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27					27			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11991	11991	11991
5°	12068	11944	12021
10°	12051	11926	11972
15°	12014	11871	11887
20°	11923	11759	11776
25°	11819	11632	11547
30°	11675	11390	11211
35°	11495	11044	10649
40°	11227	10501	9878
45°	10854	9699	8848
50°	10406	8799	7745
55°	9673	7820	6852
60°	9002	6997	6289
65°	7987	6492	5943
70°	6939	6173	5858
75°	5717	5836	5598
80°	4524	5505	5505
85°	3358	4949	5125

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10854 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.2	3.9
10°-20°	337.5	11.1
20°-30°	505.6	16.6
30°-40°	587.4	19.3
40°-50°	554.2	18.2
50°-60°	432.4	14.2
60°-70°	293.5	9.6
70°-80°	165.3	5.4
80°-90°	49.1	1.6
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°	961.2	31.6
0°-40°	1548.6	50.9
0°-60°	2535.2	83.3
0°-90°	3043.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3043.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1246	1246	1246	1246	1246	
5°	1249	1246	1236	1246	1244	119
15°	1205	1201	1191	1197	1193	340
25°	1113	1108	1095	1092	1087	512
35°	978	968	940	919	906	611
45°	797	773	712	668	650	615
55°	576	543	466	421	408	518
65°	351	319	285	267	261	350
75°	154	160	157	150	150	167
85°	30	43	45	45	46	37
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1245.5	1245.5	1245.5	1245.5	1245.5
2.5°	1251.9	1248.7	1239.1	1248.7	1247.1
5°	1248.7	1245.5	1235.9	1245.5	1243.9
7.5°	1242.3	1240.7	1229.5	1239.1	1237.5
10°	1232.7	1231.1	1219.9	1227.9	1224.7
12.5°	1219.9	1218.3	1207.0	1213.5	1210.3
15°	1205.4	1200.6	1191.0	1197.4	1192.6
17.5°	1186.2	1181.4	1170.2	1175.0	1173.4
20°	1163.8	1159.0	1147.8	1152.6	1149.4
22.5°	1139.8	1135.0	1122.2	1123.8	1119.0
25°	1112.6	1107.8	1095.0	1091.8	1087.0
27.5°	1082.2	1079.0	1059.8	1056.6	1051.8
30°	1050.2	1045.4	1024.6	1018.1	1008.5
32.5°	1016.5	1006.9	984.5	971.7	960.5
35°	978.1	968.5	939.7	918.9	906.1
37.5°	936.5	922.1	890.1	861.3	848.5
40°	893.3	877.3	835.6	797.2	786.0
42.5°	846.9	827.6	774.8	734.8	715.6
45°	797.2	773.2	712.4	667.6	649.9
47.5°	747.6	717.2	651.6	603.5	584.3
50°	694.8	658.0	587.5	536.3	517.1
52.5°	640.3	600.3	528.3	475.5	461.0
55°	576.3	542.7	465.9	421.0	408.2
57.5°	518.7	481.9	414.6	376.2	366.6
60°	467.5	422.6	363.4	334.6	326.6
62.5°	408.2	368.2	321.8	299.4	291.4
65°	350.6	318.6	285.0	267.3	260.9
67.5°	301.0	273.7	251.3	236.9	233.7
70°	246.5	232.1	219.3	208.1	208.1
72.5°	200.1	195.3	187.3	180.9	176.1
75°	153.7	160.1	156.9	150.5	150.5
77.5°	116.9	126.5	128.1	124.9	126.5
80°	81.6	96.1	99.3	97.7	99.3
82.5°	51.2	68.8	72.0	72.0	73.6
85°	30.4	43.2	44.8	44.8	46.4
87.5°	12.8	20.8	22.4	22.4	22.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)