

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: P688616

Luminaire Tested: SQ4R-PW1-075D-840-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688616
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-840-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2872.4 lumens
Efficiency: N/A
Efficacy: 107.2 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

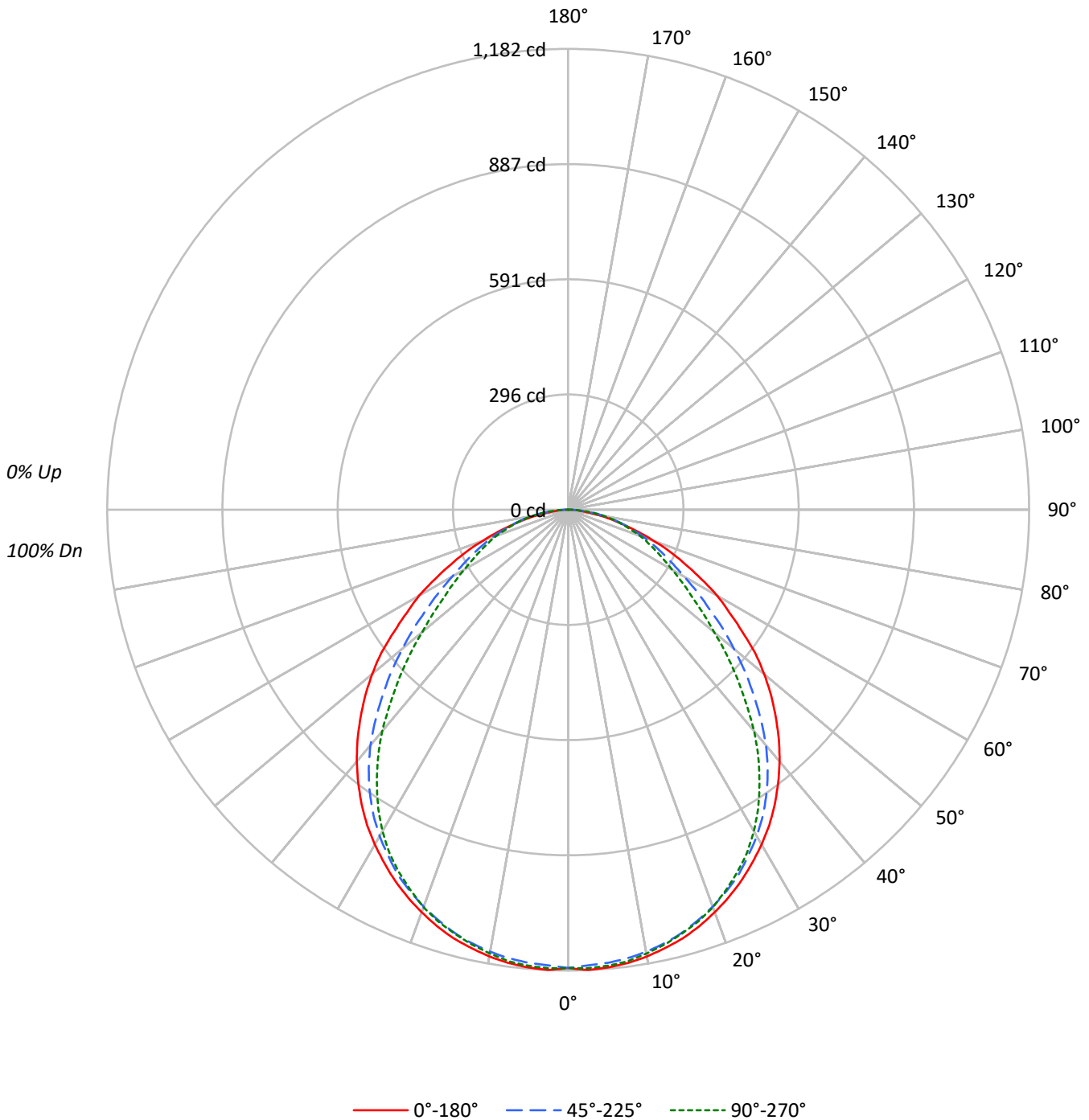
Input Watts (W): 26.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P688616

CATALOG NUMBER: SQ4R-PW1-075D-840-1-UNV-STD-W-4

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	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°	11318	11318	11318
5°	11390	11273	11347
10°	11374	11256	11301
15°	11340	11205	11220
20°	11254	11100	11115
25°	11156	10980	10899
30°	11020	10751	10583
35°	10851	10425	10052
40°	10597	9913	9324
45°	10245	9155	8353
50°	9822	8307	7311
55°	9131	7380	6467
60°	8495	6604	5936
65°	7538	6128	5611
70°	6550	5827	5528
75°	5397	5509	5282
80°	4275	5195	5195
85°	3170	4673	4838

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10245 cd/sqm

TEST NUMBER: P688616

CATALOG NUMBER: SQ4R-PW1-075D-840-1-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.5	3.9
10°-20°	318.6	11.1
20°-30°	477.2	16.6
30°-40°	554.5	19.3
40°-50°	523.1	18.2
50°-60°	408.1	14.2
60°-70°	277.1	9.6
70°-80°	156.0	5.4
80°-90°	46.3	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°	907.3	31.6
0°-40°	1461.8	50.9
0°-60°	2393.0	83.3
0°-90°	2872.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2872.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1176	1176	1176	1176	1176	
5°	1179	1176	1166	1176	1174	112
15°	1138	1133	1124	1130	1126	321
25°	1050	1046	1034	1030	1026	484
35°	923	914	887	867	855	577
45°	752	730	672	630	614	580
55°	544	512	440	397	385	489
65°	331	301	269	252	246	331
75°	145	151	148	142	142	158
85°	29	41	42	42	44	35
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1175.6	1175.6	1175.6	1175.6	1175.6
2.5°	1181.7	1178.6	1169.6	1178.6	1177.1
5°	1178.6	1175.6	1166.5	1175.6	1174.1
7.5°	1172.6	1171.1	1160.5	1169.6	1168.1
10°	1163.5	1162.0	1151.4	1159.0	1156.0
12.5°	1151.4	1149.9	1139.3	1145.4	1142.4
15°	1137.8	1133.3	1124.2	1130.3	1125.7
17.5°	1119.7	1115.2	1104.6	1109.1	1107.6
20°	1098.5	1094.0	1083.4	1088.0	1084.9
22.5°	1075.9	1071.3	1059.3	1060.8	1056.2
25°	1050.2	1045.7	1033.6	1030.5	1026.0
27.5°	1021.5	1018.5	1000.3	997.3	992.8
30°	991.3	986.7	967.1	961.0	952.0
32.5°	959.5	950.5	929.3	917.2	906.6
35°	923.3	914.2	887.0	867.4	855.3
37.5°	884.0	870.4	840.2	813.0	800.9
40°	843.2	828.1	788.8	752.5	741.9
42.5°	799.4	781.2	731.4	693.6	675.4
45°	752.5	729.8	672.4	630.1	613.5
47.5°	705.7	677.0	615.0	569.7	551.5
50°	655.8	621.0	554.6	506.2	488.1
52.5°	604.4	566.7	498.7	448.8	435.2
55°	544.0	512.3	439.7	397.4	385.3
57.5°	489.6	454.8	391.4	355.1	346.0
60°	441.2	398.9	343.0	315.8	308.3
62.5°	385.3	347.5	303.7	282.6	275.0
65°	330.9	300.7	269.0	252.3	246.3
67.5°	284.1	258.4	237.2	223.6	220.6
70°	232.7	219.1	207.0	196.4	196.4
72.5°	188.9	184.4	176.8	170.8	166.2
75°	145.1	151.1	148.1	142.0	142.0
77.5°	110.3	119.4	120.9	117.9	119.4
80°	77.1	90.7	93.7	92.2	93.7
82.5°	48.4	65.0	68.0	68.0	69.5
85°	28.7	40.8	42.3	42.3	43.8
87.5°	12.1	19.6	21.2	21.2	21.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)