

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: P688614

Luminaire Tested: SQ4R-PW1-075D-830-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688614
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-830-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
750 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2731.6 lumens
Efficiency: N/A
Efficacy: 101.9 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

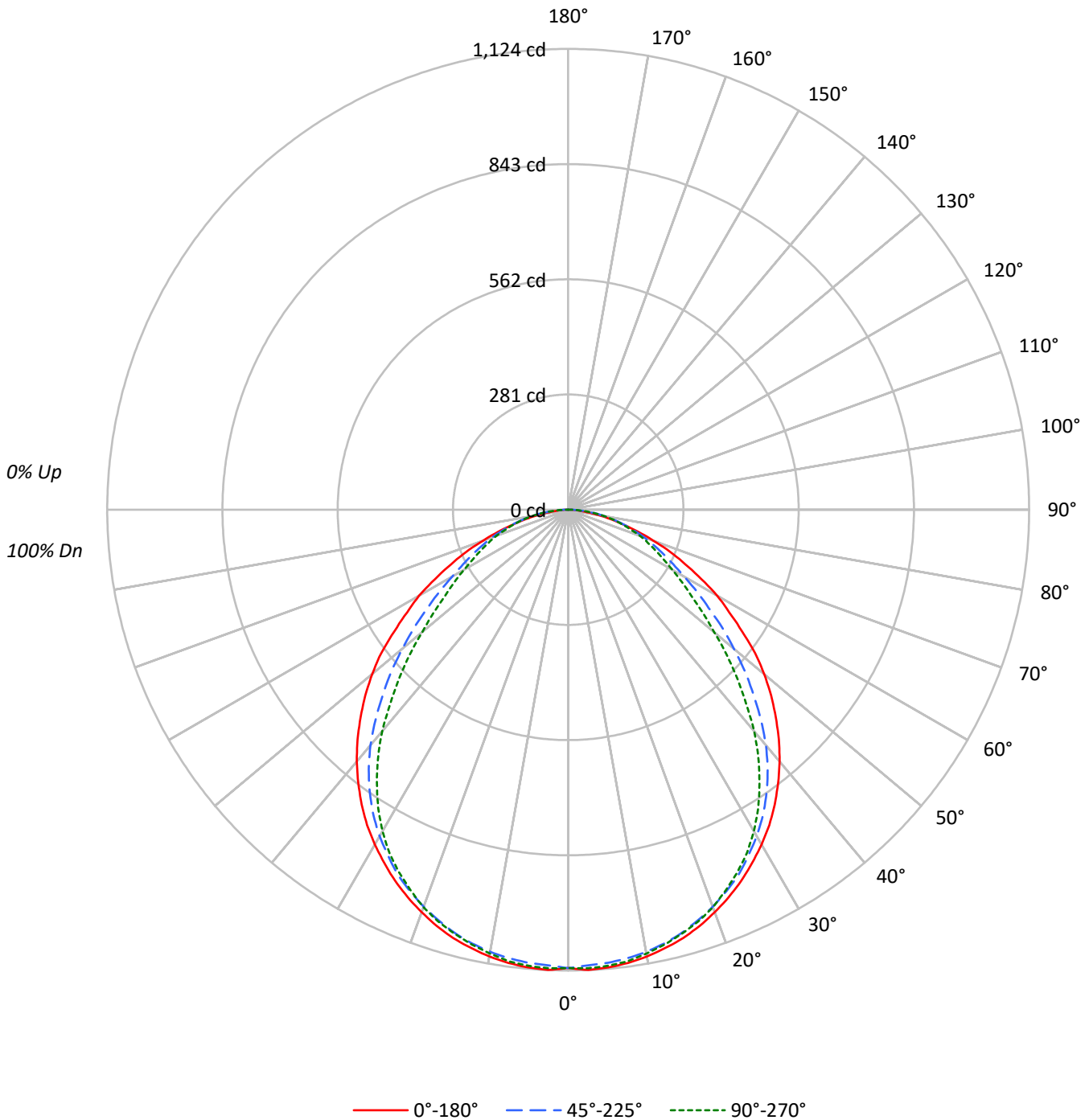
Input Watts (W): 26.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	109	105	101	97	107	103	99	96	99	96	93		95	92	90		91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78		84	80	76		81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66		75	69	65		72	68	64	62
4	85	73	65	58	82	72	64	58	69	63	57		67	61	56		65	60	56	54
5	78	66	57	51	76	65	57	50	63	55	50		61	54	49		59	53	49	47
6	72	59	51	45	70	59	50	44	57	49	44		55	49	44		54	48	43	41
7	67	54	46	40	65	53	45	40	52	45	39		50	44	39		49	43	39	37
8	63	50	41	36	61	49	41	36	48	40	35		46	40	35		45	39	35	33
9	59	46	38	32	57	45	37	32	44	37	32		43	36	32		42	36	32	30
10	55	42	34	29	54	42	34	29	41	34	29		40	33	29		39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10763	10763	10763
5°	10833	10721	10791
10°	10817	10705	10747
15°	10785	10656	10671
20°	10703	10556	10571
25°	10609	10441	10364
30°	10480	10224	10064
35°	10319	9913	9559
40°	10078	9427	8868
45°	9743	8707	7943
50°	9341	7899	6953
55°	8683	7019	6150
60°	8079	6281	5644
65°	7169	5827	5335
70°	6229	5542	5258
75°	5133	5237	5025
80°	4064	4940	4940
85°	3016	4441	4606

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9743 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.1	3.9
10°-20°	303.0	11.1
20°-30°	453.8	16.6
30°-40°	527.3	19.3
40°-50°	497.5	18.2
50°-60°	388.1	14.2
60°-70°	263.5	9.6
70°-80°	148.4	5.4
80°-90°	44.1	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°	862.8	31.6
0°-40°	1390.1	50.9
0°-60°	2275.7	83.3
0°-90°	2731.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2731.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1118	1118	1118	1118	1118	
5°	1121	1118	1109	1118	1117	107
15°	1082	1078	1069	1075	1071	305
25°	999	994	983	980	976	460
35°	878	869	844	825	813	548
45°	716	694	640	599	583	552
55°	517	487	418	378	366	465
65°	315	286	256	240	234	314
75°	138	144	141	135	135	150
85°	27	39	40	40	42	33
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1118.0	1118.0	1118.0	1118.0	1118.0
2.5°	1123.7	1120.9	1112.2	1120.9	1119.4
5°	1120.9	1118.0	1109.4	1118.0	1116.6
7.5°	1115.1	1113.7	1103.6	1112.2	1110.8
10°	1106.5	1105.1	1095.0	1102.2	1099.3
12.5°	1095.0	1093.6	1083.5	1089.3	1086.4
15°	1082.1	1077.8	1069.1	1074.9	1070.6
17.5°	1064.8	1060.5	1050.5	1054.8	1053.3
20°	1044.7	1040.4	1030.3	1034.6	1031.8
22.5°	1023.1	1018.8	1007.3	1008.8	1004.5
25°	998.7	994.4	982.9	980.0	975.7
27.5°	971.4	968.5	951.3	948.4	944.1
30°	942.7	938.4	919.7	913.9	905.3
32.5°	912.5	903.9	883.8	872.3	862.2
35°	878.0	869.4	843.5	824.8	813.3
37.5°	840.6	827.7	799.0	773.1	761.6
40°	801.9	787.5	750.1	715.6	705.6
42.5°	760.2	742.9	695.5	659.6	642.3
45°	715.6	694.1	639.5	599.2	583.4
47.5°	671.1	643.8	584.9	541.8	524.5
50°	623.7	590.6	527.4	481.4	464.2
52.5°	574.8	538.9	474.2	426.8	413.9
55°	517.3	487.1	418.2	377.9	366.4
57.5°	465.6	432.5	372.2	337.7	329.1
60°	419.6	379.4	326.2	300.3	293.1
62.5°	366.4	330.5	288.8	268.7	261.5
65°	314.7	286.0	255.8	240.0	234.2
67.5°	270.2	245.7	225.6	212.7	209.8
70°	221.3	208.4	196.9	186.8	186.8
72.5°	179.6	175.3	168.1	162.4	158.1
75°	138.0	143.7	140.8	135.1	135.1
77.5°	104.9	113.5	115.0	112.1	113.5
80°	73.3	86.2	89.1	87.7	89.1
82.5°	46.0	61.8	64.7	64.7	66.1
85°	27.3	38.8	40.2	40.2	41.7
87.5°	11.5	18.7	20.1	20.1	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)