

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: P688508

Luminaire Tested: SQ4R-PH1-075D-840-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688508
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-840-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX 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: 2792.0 lumens
Efficiency: N/A
Efficacy: 104.2 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

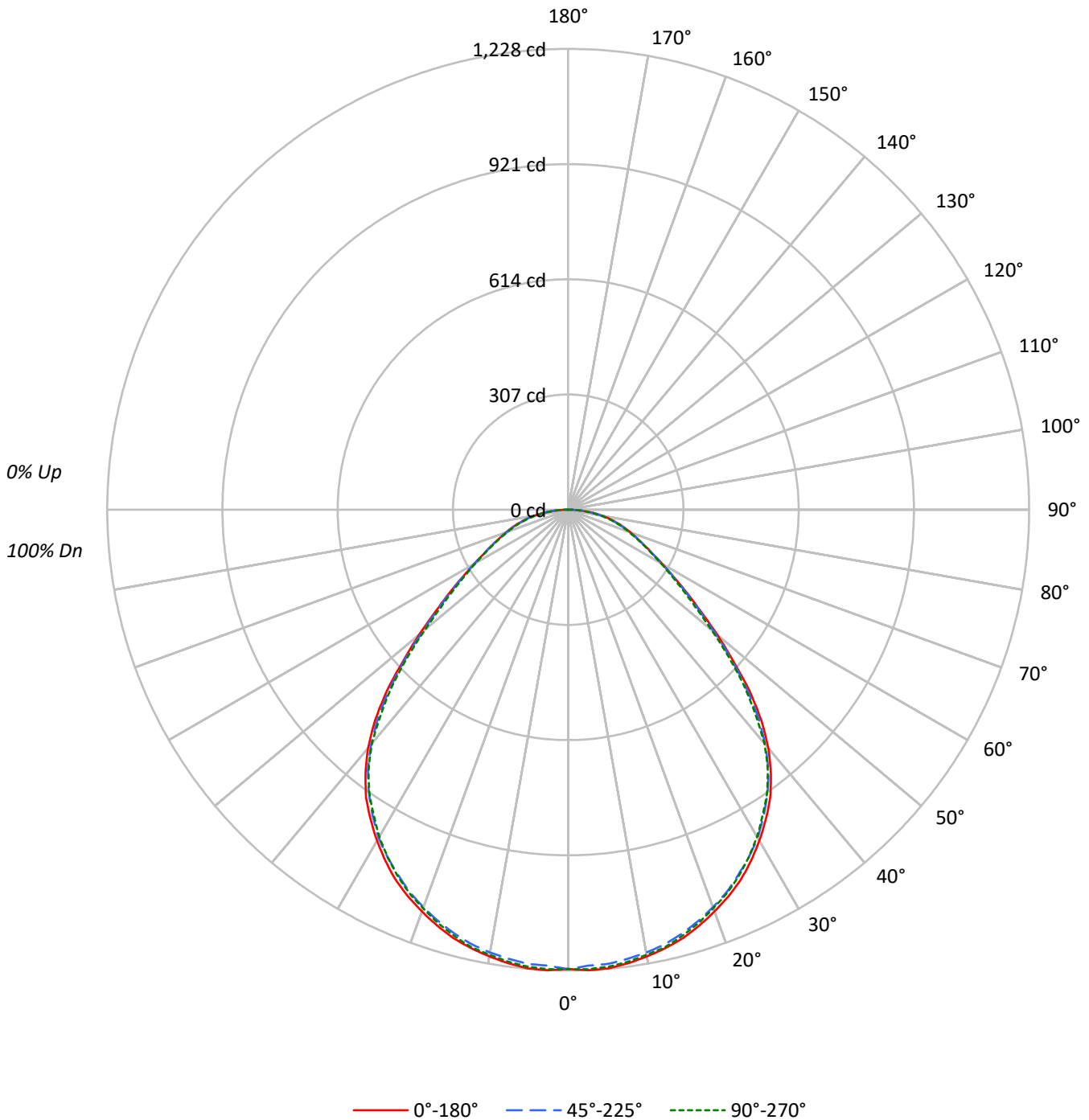
Input Watts (W): 26.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	110	105	102	98	107	103	100	96	99	96	93		95	93	91		92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79		85	81	77		82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68		76	71	67		73	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59		69	63	58		66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46		57	50	46		55	50	45	43
7	68	56	47	42	67	55	47	41	53	46	41		52	46	41		51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37		48	42	37		47	41	37	35
9	60	47	39	34	58	47	39	34	45	39	34		44	38	34		43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31		41	35	31		40	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11784	11784	11784
5°	11858	11741	11814
10°	11818	11714	11773
15°	11778	11657	11717
20°	11672	11549	11580
25°	11557	11397	11429
30°	11322	11221	11188
35°	11029	10869	10851
40°	10426	10255	10217
45°	9299	9114	9010
50°	7763	7604	7445
55°	6467	6392	6239
60°	5557	5586	5470
65°	5094	5059	4991
70°	4934	4892	4808
75°	5003	4891	4776
80°	5029	4945	4774
85°	4838	4838	4507

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9299 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.1	4.2
10°-20°	331.6	11.9
20°-30°	496.8	17.8
30°-40°	578.1	20.7
40°-50°	514.2	18.4
50°-60°	345.2	12.4
60°-70°	223.2	8.0
70°-80°	139.1	5.0
80°-90°	47.7	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°	944.6	33.8
0°-40°	1522.6	54.5
0°-60°	2382.0	85.3
0°-90°	2792.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2792.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1224	1224	1224	1224	1224	
5°	1227	1224	1215	1224	1222	116
15°	1182	1179	1170	1177	1176	333
25°	1088	1083	1073	1079	1076	500
35°	938	934	925	925	923	583
45°	683	680	669	660	662	522
55°	385	385	381	375	372	349
65°	224	225	222	221	219	224
75°	134	133	132	132	128	142
85°	44	45	44	42	41	48
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1224.0	1224.0	1224.0	1224.0	1224.0
2.5°	1228.5	1225.5	1216.4	1227.0	1225.5
5°	1227.0	1224.0	1214.9	1224.0	1222.5
7.5°	1219.4	1217.9	1207.3	1217.9	1214.9
10°	1208.9	1208.9	1198.3	1207.3	1204.3
12.5°	1196.8	1195.3	1186.2	1195.3	1193.7
15°	1181.7	1178.6	1169.6	1177.1	1175.6
17.5°	1162.0	1160.5	1149.9	1157.5	1154.5
20°	1139.3	1136.3	1127.3	1133.3	1130.3
22.5°	1115.2	1112.1	1103.1	1107.6	1106.1
25°	1088.0	1083.4	1072.9	1078.9	1075.9
27.5°	1054.7	1053.2	1042.6	1045.7	1042.6
30°	1018.5	1016.9	1009.4	1009.4	1006.4
32.5°	979.2	980.7	968.6	970.1	964.1
35°	938.4	933.8	924.8	924.8	923.3
37.5°	887.0	884.0	876.4	874.9	873.4
40°	829.6	826.6	816.0	813.0	813.0
42.5°	761.6	758.6	748.0	743.4	737.4
45°	683.0	680.0	669.4	660.3	661.8
47.5°	595.4	598.4	587.8	580.3	578.7
50°	518.3	516.8	507.7	503.2	497.1
52.5°	444.3	445.8	438.2	435.2	427.6
55°	385.3	385.3	380.8	374.7	371.7
57.5°	332.4	335.5	330.9	327.9	324.9
60°	288.6	290.1	290.1	284.1	284.1
62.5°	252.3	253.9	252.3	249.3	249.3
65°	223.6	225.1	222.1	220.6	219.1
67.5°	198.0	199.5	198.0	196.4	193.4
70°	175.3	175.3	173.8	173.8	170.8
72.5°	155.6	154.1	152.6	152.6	151.1
75°	134.5	133.0	131.5	131.5	128.4
77.5°	113.3	111.8	111.8	108.8	107.3
80°	90.7	90.7	89.2	87.6	86.1
82.5°	69.5	68.0	66.5	65.0	63.5
85°	43.8	45.3	43.8	42.3	40.8
87.5°	19.6	21.2	21.2	21.2	19.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)