

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: P688507

Luminaire Tested: SQ4R-PH1-075D-835-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688507
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-835-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
750 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2716.3 lumens
Efficiency: N/A
Efficacy: 101.4 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

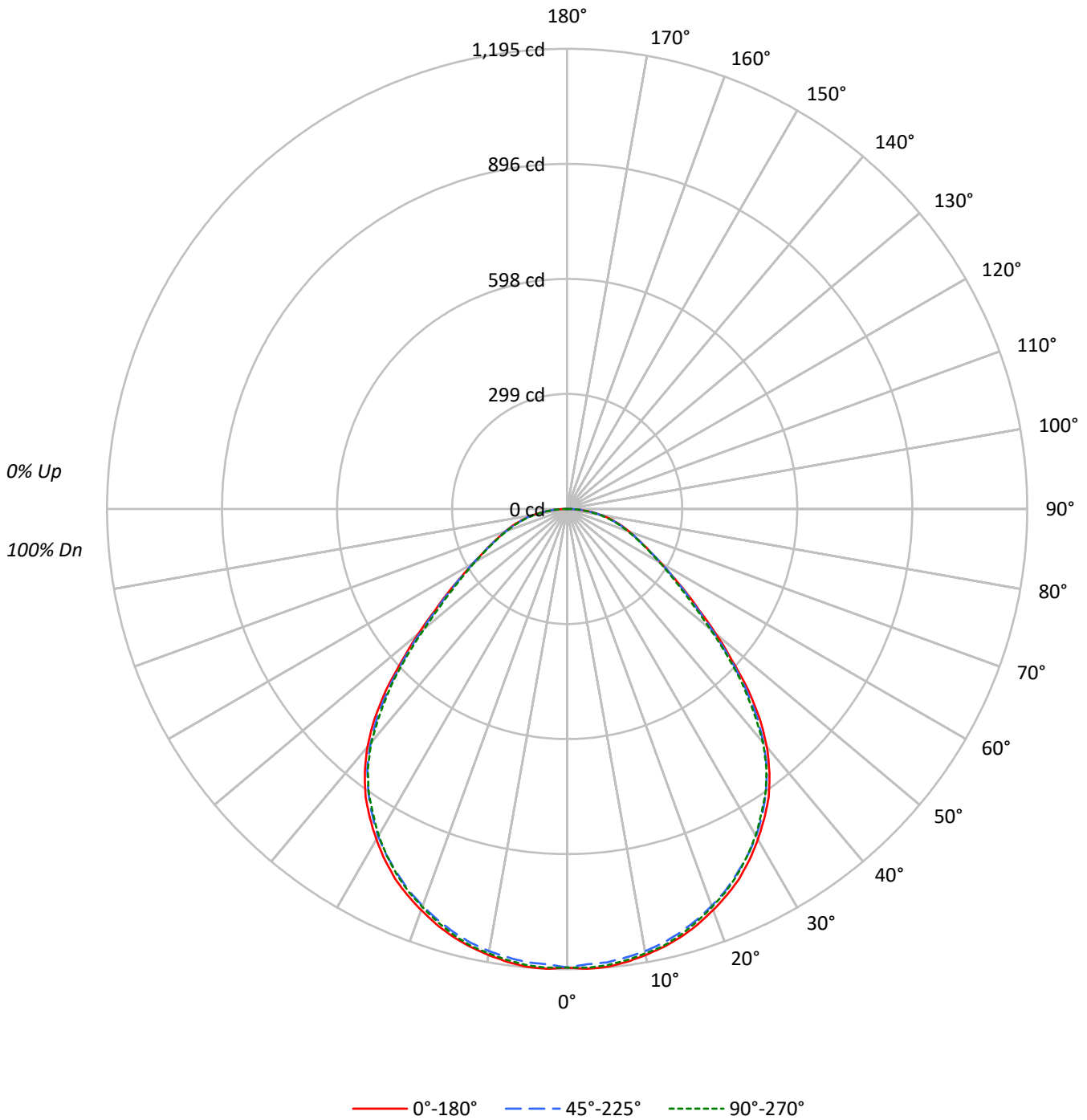
Input Watts (W): 26.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	11464	11464	11464
5°	11536	11423	11494
10°	11497	11397	11454
15°	11458	11341	11400
20°	11357	11236	11267
25°	11244	11088	11119
30°	11016	10917	10884
35°	10729	10574	10556
40°	10143	9977	9940
45°	9047	8868	8767
50°	7553	7399	7245
55°	6293	6219	6069
60°	5407	5436	5322
65°	4957	4923	4857
70°	4799	4760	4675
75°	4865	4758	4650
80°	4890	4807	4646
85°	4706	4706	4385

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9047 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.9	4.2
10°-20°	322.7	11.9
20°-30°	483.4	17.8
30°-40°	562.4	20.7
40°-50°	500.2	18.4
50°-60°	335.9	12.4
60°-70°	217.1	8.0
70°-80°	135.3	5.0
80°-90°	46.4	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°	919.0	33.8
0°-40°	1481.4	54.5
0°-60°	2317.5	85.3
0°-90°	2716.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2716.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1191	1191	1191	1191	1191	
5°	1194	1191	1182	1191	1189	113
15°	1150	1147	1138	1145	1144	324
25°	1058	1054	1044	1050	1047	487
35°	913	908	900	900	898	567
45°	664	662	651	642	644	508
55°	375	375	370	365	362	340
65°	218	219	216	215	213	218
75°	131	129	128	128	125	138
85°	43	44	43	41	40	47
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1190.8	1190.8	1190.8	1190.8	1190.8
2.5°	1195.2	1192.3	1183.4	1193.7	1192.3
5°	1193.7	1190.8	1182.0	1190.8	1189.3
7.5°	1186.4	1184.9	1174.6	1184.9	1182.0
10°	1176.1	1176.1	1165.8	1174.6	1171.7
12.5°	1164.3	1162.9	1154.0	1162.9	1161.4
15°	1149.6	1146.7	1137.9	1145.2	1143.8
17.5°	1130.5	1129.1	1118.8	1126.1	1123.2
20°	1108.5	1105.5	1096.7	1102.6	1099.7
22.5°	1084.9	1082.0	1073.2	1077.6	1076.1
25°	1058.5	1054.1	1043.8	1049.7	1046.7
27.5°	1026.1	1024.7	1014.4	1017.3	1014.4
30°	990.9	989.4	982.0	982.0	979.1
32.5°	952.6	954.1	942.3	943.8	937.9
35°	912.9	908.5	899.7	899.7	898.2
37.5°	863.0	860.0	852.7	851.2	849.7
40°	807.1	804.2	793.9	790.9	790.9
42.5°	740.9	738.0	727.7	723.3	717.4
45°	664.5	661.6	651.3	642.4	643.9
47.5°	579.2	582.2	571.9	564.5	563.1
50°	504.3	502.8	494.0	489.6	483.7
52.5°	432.2	433.7	426.3	423.4	416.0
55°	374.9	374.9	370.5	364.6	361.6
57.5°	323.4	326.4	322.0	319.0	316.1
60°	280.8	282.3	282.3	276.4	276.4
62.5°	245.5	247.0	245.5	242.6	242.6
65°	217.6	219.0	216.1	214.6	213.2
67.5°	192.6	194.1	192.6	191.1	188.2
70°	170.5	170.5	169.1	169.1	166.1
72.5°	151.4	150.0	148.5	148.5	147.0
75°	130.8	129.4	127.9	127.9	125.0
77.5°	110.3	108.8	108.8	105.8	104.4
80°	88.2	88.2	86.7	85.3	83.8
82.5°	67.6	66.2	64.7	63.2	61.7
85°	42.6	44.1	42.6	41.2	39.7
87.5°	19.1	20.6	20.6	20.6	19.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)