

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: P521941

Luminaire Tested: SQ4-WB-100U-100D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521941
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-100D-92765-1D-UNV-STD-W-4_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7946.9 lumens
Efficiency: N/A
Efficacy: 106.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

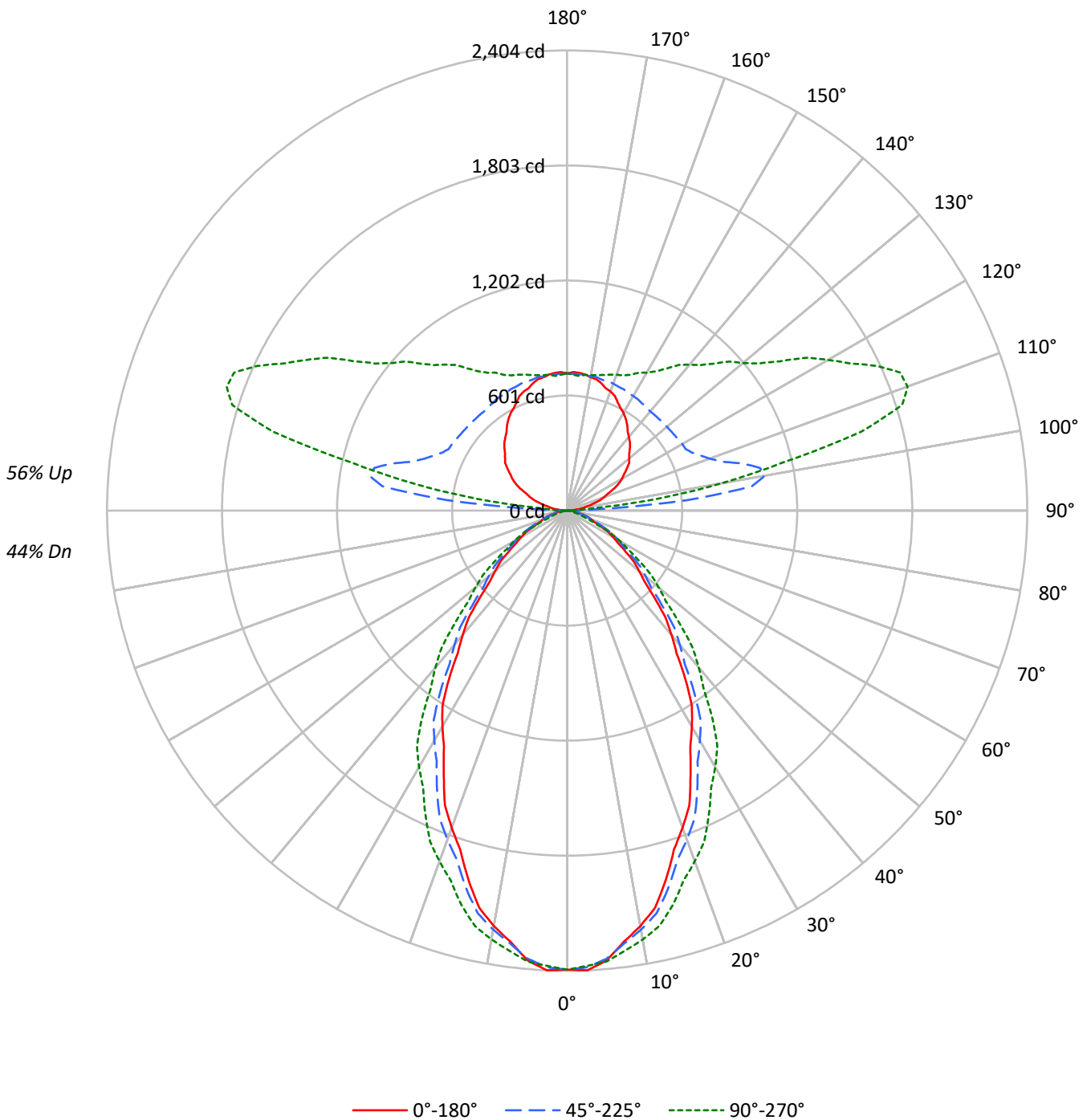
Input Watts (W): 74.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44																			
1	97	94	90	87	89	86	83	80	72	70	68	58	57	56	46	45	45	39																			
2	90	83	77	73	82	76	72	68	64	61	58	53	50	48	42	41	39	34																			
3	82	74	67	62	75	68	62	58	57	53	50	47	44	42	38	36	35	30																			
4	76	66	59	53	69	61	55	50	52	47	43	43	40	37	35	33	31	27																			
5	70	59	52	46	64	55	48	44	47	42	38	39	36	33	32	30	28	24																			
6	65	54	46	41	60	50	43	38	43	38	34	36	32	29	29	27	25	22																			
7	60	49	41	36	55	45	39	34	39	34	30	33	29	26	27	25	23	20																			
8	56	45	37	32	52	42	35	31	36	31	27	30	27	24	25	23	21	18																			
9	52	41	34	29	48	38	32	28	33	28	25	28	24	22	24	21	19	17																			
10	49	38	31	26	45	35	29	25	31	26	23	26	23	20	22	19	17	15																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22125	22125	22125
5°	21849	21771	21898
10°	20643	20830	21313
15°	19057	19499	20373
20°	17305	17956	19144
25°	15521	16367	17835
30°	13878	14786	16479
35°	12136	13013	14874
40°	10214	11026	12876
45°	8430	9157	10750
50°	7037	7672	8957
55°	5974	6584	7396
60°	5106	5709	5903
65°	4065	4801	3814
70°	3604	3747	2328
75°	3337	3037	1426
80°	3076	2795	1227
85°	2784	2562	1006

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10750 cd/sqm

TEST NUMBER: P521941

CATALOG NUMBER: SQ4-WB-100U-100D-92765-1D-UNV-STD-W-4_4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.0	2.8
10°-20°	572.1	7.2
20°-30°	741.1	9.3
30°-40°	725.7	9.1
40°-50°	555.5	7.0
50°-60°	370.1	4.7
60°-70°	202.0	2.5
70°-80°	84.2	1.1
80°-90°	23.8	0.3
90°-100°	326.6	4.1
100°-110°	929.4	11.7
110°-120°	890.4	11.2
120°-130°	704.7	8.9
130°-140°	565.7	7.1
140°-150°	442.8	5.6
150°-160°	324.0	4.1
160°-170°	200.7	2.5
170°-180°	68.1	0.9
0°-30°	1533.2	19.3
0°-40°	2258.8	28.4
0°-60°	3184.4	40.1
0°-90°	3494.4	44.0
90°-120°	2146.4	27.0
90°-150°	3859.7	48.6
90°-180°	4453.0	56.0
0°-180°	7946.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2398	2398	2398	2398	2398	
5°	2359	2336	2351	2356	2364	219
15°	1995	1988	2041	2097	2133	557
25°	1525	1529	1608	1678	1752	701
35°	1078	1083	1155	1233	1321	670
45°	646	658	702	755	824	504
55°	371	387	409	425	460	337
65°	186	202	220	192	175	194
75°	94	94	85	58	40	100
85°	26	26	24	16	10	29
90°	0	0	0	0	0	3
95°	35	141	632	219	135	40
105°	144	219	947	1673	1590	153
115°	268	324	718	1521	1786	264
125°	379	420	686	1138	1360	339
135°	463	502	677	961	1086	358
145°	546	574	683	832	906	341
155°	624	639	699	752	782	289
165°	690	692	707	722	733	194
175°	722	718	715	711	706	68
180°	717	717	717	717	717	

TEST NUMBER: P521941

CATALOG NUMBER: SQ4-WB-100U-100D-92765-1D-UNV-STD-W-4_4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2398.1	2398.1	2398.1	2398.1	2398.1
2.5°	2404.0	2382.6	2388.0	2387.8	2381.2
5°	2359.1	2335.5	2350.7	2356.2	2364.4
7.5°	2271.6	2253.7	2281.5	2302.1	2318.7
10°	2203.4	2188.0	2223.4	2253.4	2275.0
12.5°	2124.3	2111.3	2155.2	2195.4	2223.6
15°	1995.1	1987.9	2041.4	2096.9	2132.9
17.5°	1856.8	1853.3	1914.7	1979.5	2025.6
20°	1762.5	1761.5	1828.8	1896.3	1949.8
22.5°	1667.4	1669.7	1740.4	1810.6	1871.5
25°	1524.7	1528.8	1607.8	1677.9	1752.0
27.5°	1392.8	1394.6	1476.3	1550.3	1629.3
30°	1302.7	1307.8	1387.9	1464.5	1546.8
32.5°	1212.6	1218.6	1297.0	1376.1	1460.1
35°	1077.5	1082.6	1155.4	1233.1	1320.6
37.5°	938.2	945.2	1009.7	1083.2	1169.3
40°	848.1	858.4	915.5	984.7	1069.1
42.5°	761.4	774.2	827.1	892.8	968.9
45°	646.1	658.4	701.8	755.0	823.9
47.5°	546.7	560.9	594.3	640.1	698.9
50°	490.3	503.7	534.5	568.4	624.0
52.5°	440.7	454.1	481.5	507.6	555.0
55°	371.4	386.9	409.3	424.9	459.8
57.5°	314.6	329.4	347.2	354.2	375.4
60°	276.7	293.2	309.4	308.6	319.9
62.5°	242.2	256.2	272.3	261.2	261.8
65°	186.2	201.7	219.9	192.2	174.7
67.5°	150.5	153.8	172.6	134.0	113.2
70°	133.6	133.6	138.9	103.8	86.3
72.5°	117.6	117.6	112.8	84.4	66.1
75°	93.6	93.6	85.2	58.5	40.0
77.5°	72.2	71.4	65.2	43.7	29.0
80°	57.9	57.9	52.6	34.5	23.1
82.5°	45.2	45.2	40.8	26.9	17.3
85°	26.3	26.3	24.2	15.6	9.5
87.5°	9.3	9.3	8.4	5.0	4.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.9	57.8	134.1	39.0	29.4
95°	35.4	140.7	632.3	218.9	134.9
97.5°	65.1	164.8	973.8	696.8	477.5
100°	85.9	179.1	1047.9	1061.5	817.6
102.5°	108.7	194.6	1031.6	1358.7	1145.8
105°	144.4	219.1	947.1	1672.9	1590.3
107.5°	180.7	247.6	848.4	1761.5	1835.1
110°	205.8	268.4	791.7	1727.6	1892.8

TEST NUMBER: P521941

CATALOG NUMBER: SQ4-WB-100U-100D-92765-1D-UNV-STD-W-4_4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	229.8	289.2	753.6	1647.4	1883.0
115°	268.5	324.4	718.2	1521.4	1786.5
117.5°	302.5	355.0	697.2	1383.6	1664.4
120°	329.8	373.8	695.0	1304.8	1574.0
122.5°	351.6	395.6	689.5	1235.7	1485.7
125°	378.8	420.1	685.5	1137.5	1360.0
127.5°	408.5	447.2	683.3	1078.8	1262.2
130°	423.8	462.5	680.0	1037.9	1197.8
132.5°	440.2	477.7	680.0	1006.0	1153.1
135°	463.3	502.0	677.3	960.8	1086.1
137.5°	485.1	522.7	677.0	922.6	1030.8
140°	501.5	540.1	675.9	890.9	994.8
142.5°	520.0	552.3	679.2	865.5	958.8
145°	546.5	574.4	682.7	831.6	906.2
147.5°	569.1	596.3	688.7	797.3	861.8
150°	588.7	607.4	690.9	786.0	831.3
152.5°	604.0	623.7	693.1	770.6	812.7
155°	624.1	638.8	699.1	751.6	782.2
157.5°	649.2	658.0	700.4	742.9	764.8
160°	662.3	668.9	705.9	736.3	755.0
162.5°	669.9	677.6	707.0	730.8	745.1
165°	689.5	692.2	707.3	722.5	733.1
167.5°	702.9	700.5	713.5	720.4	724.7
170°	707.3	705.9	711.3	712.8	718.2
172.5°	717.1	712.5	714.6	710.6	714.9
175°	722.2	718.3	715.4	711.2	705.9
177.5°	724.4	718.0	714.6	710.3	711.3
180°	716.8	716.8	716.8	716.8	716.8

(END OF REPORT)