

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: P521993

Luminaire Tested: SQ4-WB-125U-100D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521993
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-125U-100D-92765-1D-UNV-STD-W-4_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 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: 9086.7 lumens
Efficiency: N/A
Efficacy: 108.3 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: Semi-Indirect

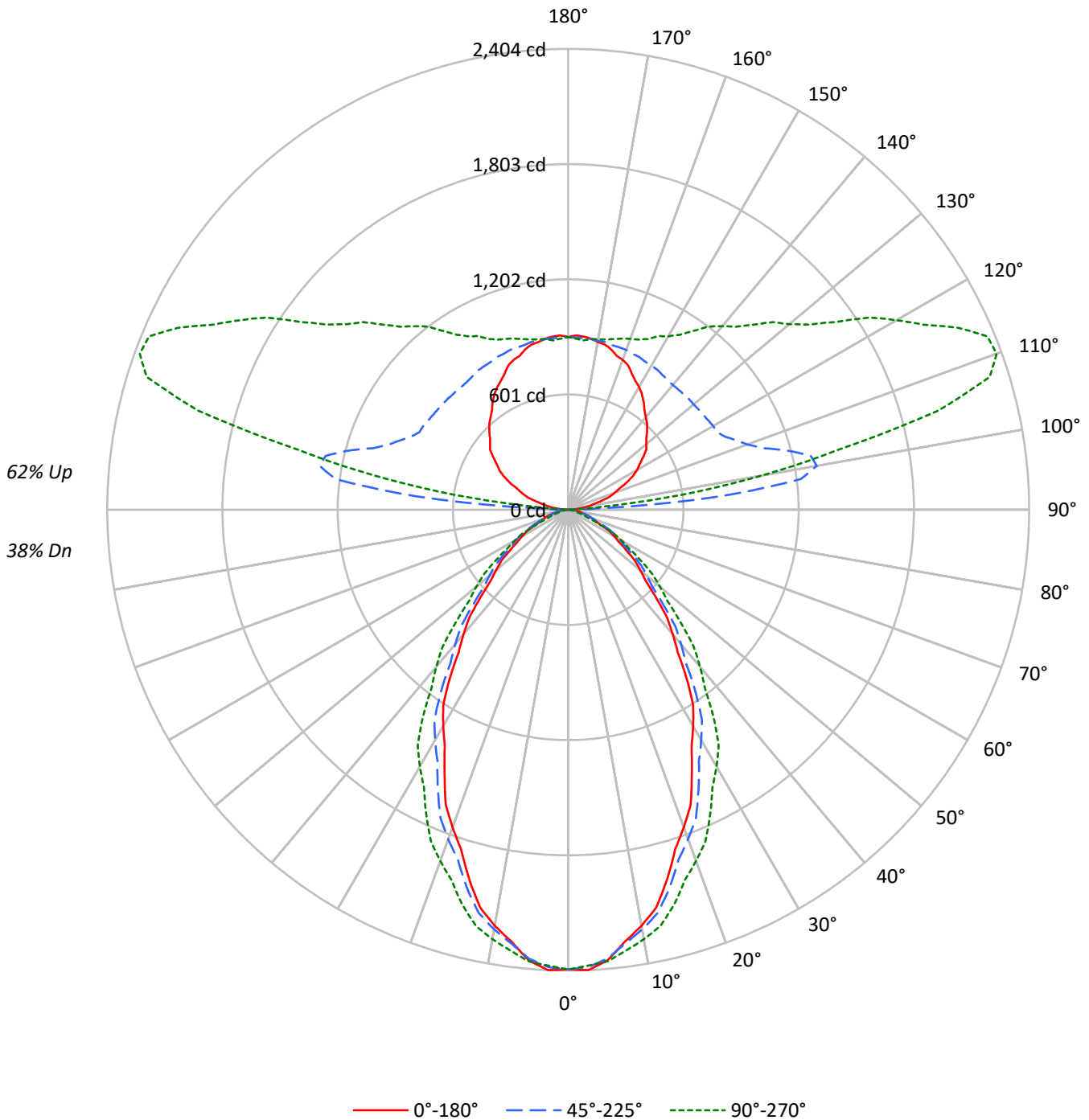
Input Watts (W): 83.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	104	104	104	104	95	95	95	95	77	77	77		61	61	61		46	46	46	38
1	96	92	89	86	87	84	81	78	69	67	65		55	53	52		42	41	40	34
2	88	82	76	71	80	74	70	66	61	58	55		49	47	45		38	36	35	30
3	81	72	66	61	74	66	61	56	55	51	47		44	41	39		34	33	31	27
4	75	65	57	52	68	59	53	48	49	45	41		40	37	34		31	29	28	24
5	69	58	51	45	63	53	47	42	45	40	36		36	33	30		29	26	25	21
6	64	52	45	40	58	48	42	37	41	36	32		33	30	27		26	24	22	19
7	59	48	40	35	54	44	37	33	37	32	29		30	27	24		24	22	20	17
8	55	43	36	31	50	40	34	29	34	29	26		28	25	22		23	20	18	16
9	51	40	33	28	47	37	31	26	31	27	23		26	23	20		21	19	17	15
10	48	37	30	25	44	34	28	24	29	24	21		24	21	18		20	17	15	14

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.0	2.4
10°-20°	572.1	6.3
20°-30°	741.1	8.2
30°-40°	725.7	8.0
40°-50°	555.5	6.1
50°-60°	370.1	4.1
60°-70°	202.0	2.2
70°-80°	84.2	0.9
80°-90°	23.8	0.3
90°-100°	410.2	4.5
100°-110°	1167.3	12.8
110°-120°	1118.4	12.3
120°-130°	885.2	9.7
130°-140°	710.5	7.8
140°-150°	556.2	6.1
150°-160°	407.0	4.5
160°-170°	252.1	2.8
170°-180°	85.5	0.9
0°-30°	1533.2	16.9
0°-40°	2258.8	24.9
0°-60°	3184.4	35.0
0°-90°	3494.4	38.5
90°-120°	2695.9	29.7
90°-150°	4847.7	53.3
90°-180°	5592.0	61.5
0°-180°	9086.7	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°	44	177	794	275	169	51
105°	181	275	1190	2101	1997	192
115°	337	408	902	1911	2244	332
125°	476	528	861	1429	1708	426
135°	582	630	851	1207	1364	449
145°	686	722	858	1044	1138	429
155°	784	802	878	944	982	362
165°	866	869	888	907	921	244
175°	907	902	899	893	887	86
180°	900	900	900	900	900	

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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°	13.7	72.6	168.4	49.0	37.0
95°	44.5	176.7	794.2	274.9	169.4
97.5°	81.8	207.0	1223.1	875.2	599.7
100°	107.8	225.0	1316.2	1333.2	1026.9
102.5°	136.6	244.4	1295.7	1706.5	1439.1
105°	181.4	275.1	1189.5	2101.2	1997.4
107.5°	227.0	311.0	1065.6	2212.4	2304.8
110°	258.4	337.1	994.4	2169.9	2377.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	288.6	363.2	946.5	2069.2	2365.0
115°	337.2	407.5	902.0	1910.8	2243.9
117.5°	380.0	445.9	875.6	1737.7	2090.5
120°	414.2	469.4	872.9	1638.8	1976.9
122.5°	441.6	496.8	866.1	1552.0	1866.0
125°	475.8	527.7	860.9	1428.7	1708.1
127.5°	513.1	561.7	858.2	1355.0	1585.3
130°	532.3	580.8	854.1	1303.6	1504.5
132.5°	552.8	600.0	854.1	1263.6	1448.3
135°	581.9	630.5	850.7	1206.8	1364.1
137.5°	609.3	656.5	850.3	1158.7	1294.6
140°	629.9	678.4	848.9	1118.9	1249.4
142.5°	653.1	693.6	853.0	1087.1	1204.3
145°	686.3	721.5	857.5	1044.5	1138.2
147.5°	714.8	748.9	865.0	1001.4	1082.4
150°	739.4	762.8	867.8	987.2	1044.1
152.5°	758.6	783.3	870.5	967.9	1020.8
155°	783.9	802.3	878.0	943.9	982.4
157.5°	815.4	826.4	879.7	933.1	960.5
160°	831.8	840.2	886.6	924.8	948.2
162.5°	841.4	851.1	888.0	917.8	935.9
165°	866.1	869.4	888.3	907.4	920.8
167.5°	882.8	879.8	896.2	904.9	910.2
170°	888.3	886.6	893.4	895.3	902.0
172.5°	900.6	894.9	897.5	892.5	897.9
175°	907.1	902.1	898.6	893.3	886.6
177.5°	909.9	901.8	897.5	892.1	893.4
180°	900.3	900.3	900.3	900.3	900.3

(END OF REPORT)