

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: P854147

Luminaire Tested: SQ2-PP3-125U-125D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854147
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-125U-125D-940-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

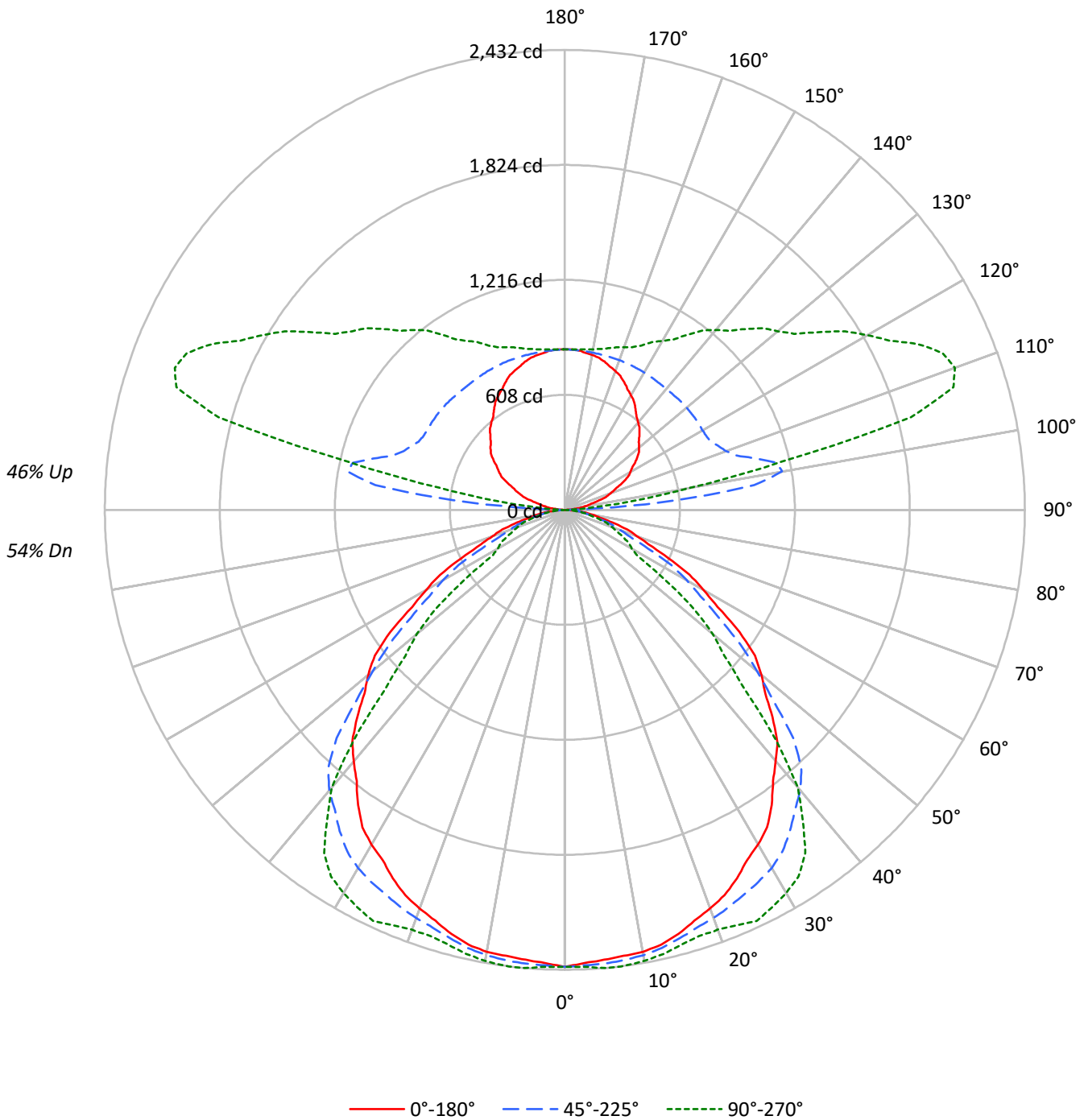
Lumens per Lamp: N/A
Luminaire Lumens: 11326.0 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 93.1
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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	60	60	60	54
1	99	95	91	88	92	88	85	82	76	74	71	64	63	61	54	53	51	46
2	91	84	78	73	84	78	73	68	67	63	60	57	54	52	48	46	44	40
3	83	74	67	61	77	69	63	58	60	55	51	51	47	44	43	40	38	34
4	76	66	58	52	71	61	55	49	53	48	44	46	42	38	38	36	33	30
5	70	59	51	45	65	55	48	43	48	42	38	41	37	34	35	32	29	26
6	65	53	45	39	60	49	42	37	43	38	33	37	33	30	32	28	26	23
7	60	48	40	34	55	45	38	33	39	34	29	34	29	26	29	26	23	20
8	56	43	36	31	52	41	34	29	36	30	26	31	27	23	27	23	21	18
9	52	40	32	27	48	37	31	26	33	27	24	29	24	21	25	21	19	17
10	48	36	29	24	45	34	28	23	30	25	21	26	22	19	23	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	39018	39018	39018
5°	38712	39044	39415
10°	38908	39202	39704
15°	38815	39199	39798
20°	38538	39460	40601
25°	38318	39957	42733
30°	38102	40768	43626
35°	37562	40885	43706
40°	36558	40813	40381
45°	35465	38963	30741
50°	34073	33239	25603
55°	31713	27972	18410
60°	27306	24006	13198
65°	23033	18544	12982
70°	19176	14592	12420
75°	16257	12589	11634
80°	13780	10925	10451
85°	10893	8985	5687

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 38963 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	230.1	2.0
10°-20°	666.0	5.9
20°-30°	1043.3	9.2
30°-40°	1287.0	11.4
40°-50°	1211.8	10.7
50°-60°	858.0	7.6
60°-70°	488.9	4.3
70°-80°	241.9	2.1
80°-90°	60.1	0.5
90°-100°	324.8	2.9
100°-110°	1057.5	9.3
110°-120°	1046.1	9.2
120°-130°	854.9	7.5
130°-140°	698.7	6.2
140°-150°	544.2	4.8
150°-160°	392.3	3.5
160°-170°	239.8	2.1
170°-180°	80.9	0.7
0°-30°	1939.4	17.1
0°-40°	3226.4	28.5
0°-60°	5296.2	46.8
0°-90°	6086.9	53.7
90°-120°	2428.4	21.4
90°-150°	4526.1	40.0
90°-180°	5239.0	46.3
0°-180°	11326.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2417	2417	2417	2417	2417	
5°	2388	2431	2409	2414	2432	228
15°	2322	2355	2345	2368	2381	654
25°	2151	2206	2243	2334	2399	991
35°	1906	1958	2074	2192	2217	1188
45°	1553	1671	1706	1446	1346	1196
55°	1127	1194	994	749	654	994
65°	603	635	485	342	340	605
75°	261	288	202	189	186	282
85°	59	54	48	38	31	69
90°	0	3	7	6	6	5
95°	44	134	595	212	131	51
105°	180	259	1048	2001	1895	192
115°	332	396	853	1759	2069	329
125°	462	515	842	1388	1637	411
135°	558	616	838	1198	1352	431
145°	652	700	836	1032	1130	408
155°	744	768	841	924	959	343
165°	812	819	843	874	885	229
175°	846	846	846	852	850	80
180°	849	849	849	849	849	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2416.6	2416.6	2416.6	2416.6	2416.6
2.5°	2398.2	2432.2	2410.5	2414.7	2418.7
5°	2388.5	2431.0	2409.0	2414.5	2431.9
7.5°	2379.3	2422.8	2401.3	2410.5	2431.9
10°	2373.2	2410.7	2391.1	2404.2	2421.7
12.5°	2354.8	2390.3	2372.7	2389.9	2405.4
15°	2322.1	2354.6	2345.1	2368.4	2380.9
17.5°	2277.7	2317.1	2317.0	2350.0	2363.0
20°	2242.9	2290.4	2296.6	2338.0	2363.0
22.5°	2206.1	2261.6	2272.0	2334.3	2377.3
25°	2150.9	2205.9	2242.9	2333.8	2398.7
27.5°	2086.6	2141.0	2217.4	2319.2	2370.6
30°	2043.7	2096.1	2186.7	2292.5	2340.0
32.5°	1990.5	2045.0	2141.7	2255.6	2299.1
35°	1905.7	1958.2	2074.3	2192.4	2217.4
37.5°	1808.1	1867.6	1997.7	2063.6	2065.1
40°	1734.5	1812.0	1936.4	1948.4	1915.9
42.5°	1663.0	1762.4	1850.5	1796.7	1652.3
45°	1553.2	1670.6	1706.4	1446.2	1346.3
47.5°	1436.2	1552.1	1494.9	1212.9	1143.9
50°	1356.5	1466.4	1323.3	1084.2	1019.3
52.5°	1266.6	1364.5	1170.0	960.8	861.9
55°	1126.6	1194.0	993.7	748.9	654.0
57.5°	958.0	1005.4	849.6	562.1	455.7
60°	845.6	883.0	743.4	461.2	408.7
62.5°	743.4	776.8	633.0	400.6	382.2
65°	602.9	635.3	485.4	342.3	339.8
67.5°	479.7	515.2	372.5	298.8	295.8
70°	406.2	443.6	309.1	268.1	263.1
72.5°	344.9	380.3	262.1	235.5	232.5
75°	260.6	288.0	201.8	189.0	186.5
77.5°	189.0	206.5	150.2	143.5	141.0
80°	148.2	155.7	117.5	114.9	112.4
82.5°	111.4	108.9	88.9	86.2	81.7
85°	58.8	53.8	48.5	38.1	30.7
87.5°	18.4	19.0	9.6	7.4	7.4
90°	0.0	3.1	7.3	6.3	6.3
92.5°	15.0	54.1	172.8	56.9	43.9
95°	43.9	133.7	595.3	212.3	130.6
97.5°	82.5	174.0	1010.4	615.4	375.6
100°	107.6	197.4	1166.7	1040.3	674.7
102.5°	136.0	222.6	1147.4	1539.1	1170.2
105°	179.6	259.3	1047.6	2000.8	1894.6
107.5°	226.9	301.8	952.7	2040.9	2153.4
110°	261.1	329.5	907.6	1991.2	2194.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	289.5	357.1	879.2	1901.4	2163.5
115°	332.1	396.5	853.3	1758.6	2069.1
117.5°	376.0	434.0	843.3	1627.8	1936.8
120°	401.1	458.3	840.8	1547.4	1846.6
122.5°	425.3	481.7	841.6	1477.5	1756.3
125°	461.6	514.8	841.8	1388.5	1636.7
127.5°	492.8	547.1	841.6	1321.8	1528.7
130°	512.8	568.0	840.8	1283.7	1468.5
132.5°	530.4	588.0	839.9	1248.3	1421.7
135°	557.7	615.9	837.6	1198.3	1351.5
137.5°	584.5	643.1	835.4	1147.6	1283.6
140°	603.7	659.9	834.5	1113.2	1241.9
142.5°	622.1	675.8	834.5	1080.3	1195.1
145°	651.7	699.7	835.6	1032.1	1130.1
147.5°	680.6	722.2	837.0	991.0	1066.8
150°	699.8	736.5	838.7	966.5	1030.9
152.5°	719.0	749.2	839.5	947.9	999.1
155°	743.6	768.2	840.8	924.1	958.8
157.5°	767.0	784.6	842.0	906.5	930.8
160°	781.2	795.5	842.9	895.5	914.9
162.5°	793.8	804.8	842.9	886.2	900.7
165°	811.5	818.7	842.9	874.4	884.6
167.5°	824.1	828.6	843.1	865.6	870.9
170°	832.4	834.5	843.9	859.6	861.7
172.5°	838.3	839.5	845.6	856.2	855.8
175°	846.0	846.0	846.0	852.2	850.2
177.5°	849.1	848.3	847.5	851.6	848.3
180°	849.1	849.1	849.1	849.1	849.1



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	20.62	21.48	21.55	22.42	23.64	17.01	17.87	17.94	18.82	20.04
	3H	21.71	22.48	22.65	23.43	24.68	18.12	18.89	19.06	19.84	21.08
	4H	22.05	22.78	23.01	23.74	24.99	18.58	19.31	19.54	20.26	21.52
	6H	22.27	22.94	23.24	23.90	25.16	18.93	19.59	19.89	20.56	21.82
	8H	22.32	22.95	23.29	23.93	25.20	19.01	19.65	19.99	20.63	21.89
	12H	22.33	22.94	23.31	23.91	25.20	19.03	19.63	20.01	20.60	21.89
4H	2H	20.72	21.45	21.69	22.41	23.66	17.73	18.45	18.69	19.41	20.66
	3H	22.03	22.63	23.01	23.62	24.89	18.98	19.58	19.95	20.57	21.83
	4H	22.51	23.06	23.49	24.04	25.33	19.53	20.08	20.51	21.06	22.35
	6H	22.84	23.32	23.84	24.32	25.61	19.97	20.44	20.97	21.45	22.74
	8H	22.94	23.38	23.93	24.38	25.68	20.09	20.53	21.09	21.53	22.83
	12H	22.97	23.37	23.99	24.39	25.69	20.12	20.52	21.13	21.53	22.84
8H	4H	22.53	22.96	23.52	23.96	25.27	19.80	20.24	20.80	21.24	22.55
	6H	22.96	23.32	23.98	24.36	25.66	20.35	20.71	21.37	21.75	23.05
	8H	23.11	23.43	24.14	24.46	25.78	20.54	20.86	21.56	21.88	23.20
	12H	23.20	23.48	24.23	24.50	25.87	20.61	20.89	21.64	21.91	23.28
12H	4H	22.48	22.88	23.50	23.90	25.20	19.81	20.21	20.83	21.22	22.53
	6H	22.95	23.27	23.97	24.29	25.61	20.40	20.72	21.43	21.75	23.07
	8H	23.12	23.40	24.15	24.42	25.78	20.61	20.89	21.64	21.91	23.28