

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: P854393

Luminaire Tested: SQ2-WBM-125U-075D-940-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854393  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G3-2104-222-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBM-125U-075D-940-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

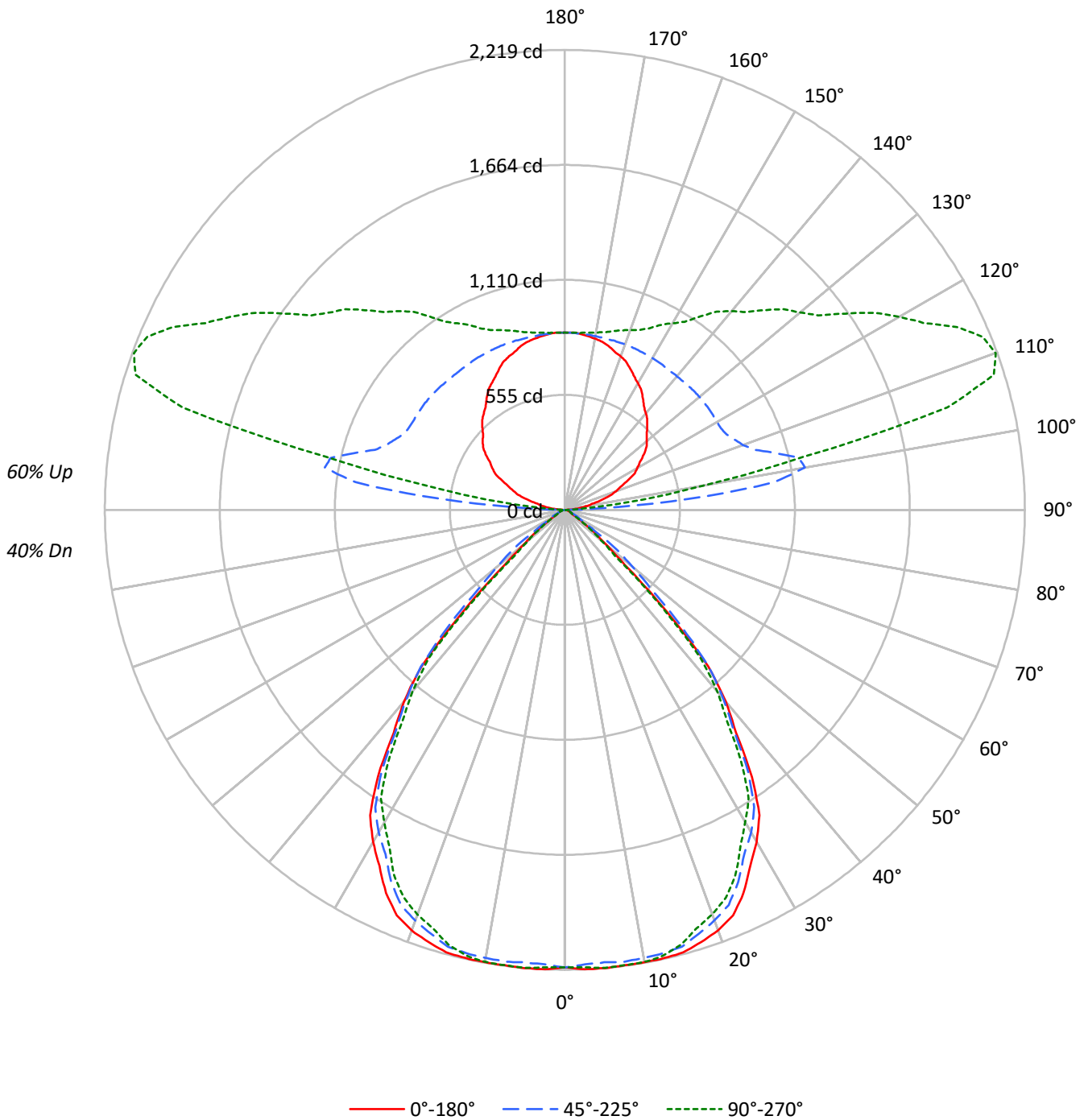
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8735.4 lumens  
Efficiency: N/A  
Efficacy: 122.2 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.18 / 1.17  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 71.5  
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

TEST NUMBER: P854393

CATALOG NUMBER: SQ2-WBM-125U-075D-940-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P854393

CATALOG NUMBER: SQ2-WBM-125U-075D-940-UNV-STD-W-4

**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	50	30	10	0	
RCR																						
0	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47	40				
1	97	93	90	87	88	85	82	80	70	68	66	56	55	54	43	43	42	36				
2	89	83	78	73	81	76	72	68	63	60	57	51	49	47	40	39	38	33				
3	83	74	68	63	75	68	63	59	57	53	50	47	44	42	37	35	34	30				
4	76	67	60	55	70	62	56	51	52	47	44	43	40	37	34	32	31	27				
5	71	60	53	48	64	56	50	45	47	42	39	39	36	33	31	29	28	24				
6	65	55	47	42	60	51	44	40	43	38	35	36	32	30	29	27	25	22				
7	61	50	43	38	56	46	40	35	39	35	31	33	30	27	27	25	23	20				
8	57	46	38	34	52	42	36	32	36	31	28	30	27	25	25	23	21	19				
9	53	42	35	30	49	39	33	29	33	29	26	28	25	22	23	21	19	17				
10	50	38	32	27	46	36	30	26	31	26	23	26	23	20	22	19	18	16				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	35645	35645	35645
5°	35971	35525	35953
10°	36334	35987	36316
15°	36939	36461	36284
20°	37115	36242	35697
25°	36351	35277	34693
30°	34491	33504	32438
35°	31020	30374	29268
40°	25429	25050	24091
45°	15901	18100	14936
50°	6222	10555	5689
55°	3068	4915	3040
60°	1437	2357	1298
65°	1295	1375	1215
70°	1251	1298	1199
75°	1254	1254	1123
80°	1181	1181	1079
85°	1186	982	982

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 18100 cd/sqm



TEST NUMBER: P854393

CATALOG NUMBER: SQ2-WBM-125U-075D-940-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	211.1	2.4
10°-20°	617.2	7.1
20°-30°	912.6	10.4
30°-40°	944.2	10.8
40°-50°	568.0	6.5
50°-60°	135.9	1.6
60°-70°	37.1	0.4
70°-80°	20.8	0.2
80°-90°	7.5	0.1
90°-100°	327.4	3.7
100°-110°	1066.0	12.2
110°-120°	1054.5	12.1
120°-130°	861.7	9.9
130°-140°	704.3	8.1
140°-150°	548.6	6.3
150°-160°	395.4	4.5
160°-170°	241.7	2.8
170°-180°	81.5	0.9
0°-30°	1740.8	19.9
0°-40°	2685.1	30.7
0°-60°	3389.0	38.8
0°-90°	3454.4	39.5
90°-120°	2447.9	28.0
90°-150°	4562.4	52.2
90°-180°	5281.0	60.5
0°-180°	8735.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2208	2208	2208	2208	2208	
5°	2219	2212	2192	2221	2218	212
15°	2210	2226	2181	2181	2171	623
25°	2040	2057	1980	1959	1947	933
35°	1574	1572	1541	1506	1485	966
45°	696	791	793	753	654	539
55°	109	122	175	116	108	109
65°	34	35	36	34	32	34
75°	20	20	20	19	18	21
85°	6	6	5	5	5	6
90°	0	3	7	6	6	2
95°	44	135	600	214	132	51
105°	181	261	1056	2017	1910	193
115°	335	400	860	1773	2086	331
125°	465	519	849	1400	1650	414
135°	562	621	844	1208	1362	434
145°	657	705	842	1040	1139	411
155°	750	774	848	932	966	345
165°	818	825	850	881	892	230
175°	853	853	853	859	857	81
180°	856	856	856	856	856	



TEST NUMBER: P854393

CATALOG NUMBER: SQ2-WBM-125U-075D-940-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2207.7	2207.7	2207.7	2207.7	2207.7
2.5°	2218.7	2212.9	2195.0	2213.6	2209.4
5°	2219.4	2212.1	2191.9	2221.4	2218.3
7.5°	2217.0	2213.9	2198.4	2220.7	2216.0
10°	2216.2	2217.2	2195.0	2218.2	2215.1
12.5°	2215.4	2223.8	2191.6	2209.7	2202.4
15°	2209.9	2226.4	2181.3	2181.0	2170.7
17.5°	2186.4	2206.0	2145.7	2129.1	2116.5
20°	2160.1	2179.8	2109.3	2082.7	2077.6
22.5°	2118.6	2139.9	2064.4	2035.2	2026.8
25°	2040.5	2057.1	1980.2	1958.8	1947.4
27.5°	1936.4	1945.5	1873.3	1848.8	1833.1
30°	1850.0	1854.1	1797.1	1764.8	1739.9
32.5°	1747.6	1751.7	1701.4	1670.9	1651.0
35°	1573.8	1571.7	1541.0	1505.6	1484.9
37.5°	1356.4	1359.3	1335.0	1307.0	1286.1
40°	1206.5	1208.6	1188.5	1148.2	1143.0
42.5°	1023.6	1054.7	1027.7	996.2	972.0
45°	696.4	790.6	792.7	753.4	654.1
47.5°	393.3	500.5	562.4	449.6	328.9
50°	247.7	320.1	420.2	266.8	226.5
52.5°	175.7	212.5	316.9	187.7	166.4
55°	109.0	122.5	174.6	116.2	108.0
57.5°	64.8	78.6	99.3	78.7	65.6
60°	44.5	55.8	73.0	51.6	40.2
62.5°	38.5	43.3	57.8	40.8	36.8
65°	33.9	34.9	36.0	33.8	31.8
67.5°	29.8	30.9	30.1	29.8	27.9
70°	26.5	27.5	27.5	26.4	25.4
72.5°	23.9	25.0	24.1	23.9	22.0
75°	20.1	20.1	20.1	19.0	18.0
77.5°	15.2	16.3	15.2	15.2	14.2
80°	12.7	13.7	12.7	12.7	11.6
82.5°	10.2	10.4	10.2	10.1	9.1
85°	6.4	6.4	5.3	5.3	5.3
87.5°	1.7	3.1	3.2	3.0	3.0
90°	0.0	3.1	7.4	6.3	6.3
92.5°	15.2	54.5	174.1	57.4	44.2
95°	44.2	134.8	600.1	214.0	131.6
97.5°	83.2	175.4	1018.5	620.3	378.6
100°	108.4	199.0	1176.0	1048.7	680.1
102.5°	137.1	224.4	1156.6	1551.4	1179.6
105°	181.1	261.4	1056.0	2016.9	1909.8
107.5°	228.7	304.2	960.4	2057.3	2170.7
110°	263.2	332.2	914.9	2007.1	2212.0



TEST NUMBER: P854393

CATALOG NUMBER: SQ2-WBM-125U-075D-940-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	291.8	360.0	886.3	1916.7	2180.8
115°	334.8	399.7	860.2	1772.7	2085.6
117.5°	379.0	437.5	850.1	1640.9	1952.4
120°	404.3	461.9	847.5	1559.8	1861.4
122.5°	428.7	485.5	848.4	1489.4	1770.4
125°	465.3	518.9	848.6	1399.6	1649.8
127.5°	496.7	551.5	848.4	1332.4	1540.9
130°	516.9	572.5	847.5	1293.9	1480.3
132.5°	534.6	592.7	846.7	1258.3	1433.1
135°	562.2	620.9	844.4	1207.9	1362.4
137.5°	589.2	648.3	842.0	1156.8	1293.9
140°	608.5	665.2	841.2	1122.1	1251.8
142.5°	627.1	681.2	841.2	1088.9	1204.6
145°	657.0	705.3	842.3	1040.3	1139.2
147.5°	686.0	728.0	843.7	999.0	1075.4
150°	705.4	742.5	845.4	974.3	1039.1
152.5°	724.8	755.2	846.3	955.5	1007.1
155°	749.6	774.3	847.5	931.5	966.5
157.5°	773.2	790.9	848.8	913.8	938.3
160°	787.5	801.9	849.6	902.7	922.3
162.5°	800.1	811.3	849.6	893.3	908.0
165°	818.0	825.3	849.6	881.4	891.7
167.5°	830.7	835.2	849.8	872.5	877.8
170°	839.1	841.2	850.7	866.5	868.6
172.5°	845.0	846.2	852.4	863.1	862.7
175°	852.8	852.8	852.8	859.1	857.0
177.5°	855.9	855.1	854.3	858.4	855.1
180°	855.9	855.9	855.9	855.9	855.9

-----



TEST NUMBER: P854393

CATALOG NUMBER: SQ2-WBM-125U-075D-940-UNV-STD-W-4

**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	4.23	4.90	5.30	5.95	7.37	3.88	4.55	4.95	5.60	7.03
	3H	4.72	5.32	5.80	6.38	7.82	4.39	4.98	5.46	6.04	7.48
	4H	4.98	5.55	6.07	6.61	8.06	4.62	5.19	5.71	6.25	7.70
	6H	5.21	5.73	6.31	6.79	8.25	4.83	5.34	5.92	6.41	7.87
	8H	5.29	5.78	6.39	6.86	8.31	4.89	5.38	5.99	6.46	7.92
	12H	5.34	5.80	6.44	6.88	8.35	4.92	5.38	6.02	6.46	7.93
4H	2H	4.23	4.79	5.32	5.85	7.30	3.91	4.47	5.01	5.54	6.99
	3H	4.93	5.40	6.03	6.49	7.95	4.63	5.09	5.73	6.19	7.65
	4H	5.33	5.76	6.44	6.84	8.32	5.00	5.43	6.11	6.51	7.99
	6H	5.71	6.07	6.82	7.17	8.65	5.35	5.71	6.46	6.81	8.29
	8H	5.85	6.19	6.96	7.28	8.77	5.47	5.81	6.58	6.90	8.39
	12H	5.94	6.25	7.07	7.35	8.85	5.53	5.84	6.66	6.94	8.44
8H	4H	5.41	5.75	6.52	6.85	8.34	5.11	5.45	6.22	6.55	8.04
	6H	5.92	6.20	7.05	7.34	8.82	5.58	5.86	6.71	7.00	8.49
	8H	6.15	6.39	7.29	7.51	9.02	5.78	6.03	6.92	7.15	8.65
	12H	6.33	6.54	7.46	7.65	9.20	5.92	6.13	7.06	7.25	8.79
12H	4H	5.38	5.69	6.51	6.80	8.29	5.09	5.39	6.21	6.50	8.00
	6H	5.94	6.18	7.08	7.30	8.81	5.61	5.86	6.75	6.98	8.48
	8H	6.19	6.40	7.33	7.52	9.06	5.84	6.05	6.97	7.16	8.71