

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: P854405

Luminaire Tested: SQ2-WBM-150U-075D-940-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854405  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-14, G3-2104-222-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBM-150U-075D-940-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

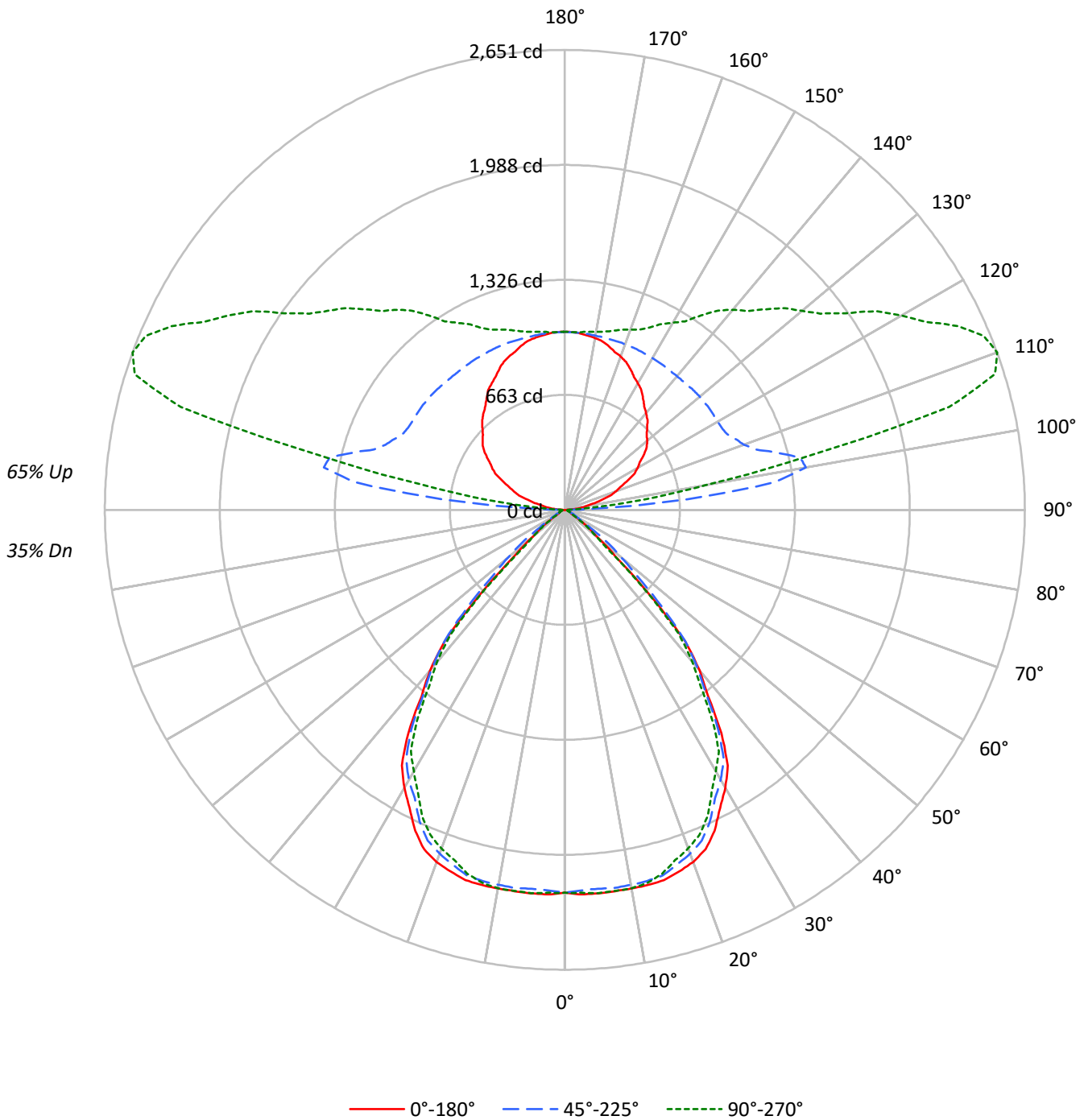
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9785.1 lumens  
Efficiency: N/A  
Efficacy: 116.2 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): 84.2  
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	94	94	94	94	75	75	75	58	58	58	43	43	43	35
1	96	92	89	86	87	84	81	78	68	66	64	53	52	51	40	39	38	32
2	88	82	77	72	80	75	70	66	61	58	55	48	46	45	36	35	34	29
3	81	73	67	62	74	67	61	57	55	51	48	44	41	39	34	32	31	26
4	75	66	59	53	68	60	54	50	50	45	42	40	37	35	31	29	28	24
5	69	59	52	47	63	54	48	43	45	41	37	37	34	31	29	27	25	22
6	64	54	46	41	58	49	43	38	41	37	33	34	30	28	26	24	23	20
7	60	49	41	36	54	45	39	34	38	33	30	31	28	25	24	22	21	18
8	56	44	37	33	51	41	35	31	35	30	27	28	25	23	23	21	19	17
9	52	41	34	29	47	38	32	28	32	27	24	26	23	21	21	19	17	15
10	49	37	31	26	44	35	29	25	29	25	22	24	21	19	20	18	16	14

**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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	211.1	2.2
10°-20°	617.2	6.3
20°-30°	912.6	9.3
30°-40°	944.2	9.6
40°-50°	568.0	5.8
50°-60°	135.9	1.4
60°-70°	37.1	0.4
70°-80°	20.8	0.2
80°-90°	7.7	0.1
90°-100°	390.8	4.0
100°-110°	1279.7	13.1
110°-120°	1265.1	12.9
120°-130°	1034.2	10.6
130°-140°	843.9	8.6
140°-150°	656.8	6.7
150°-160°	472.9	4.8
160°-170°	289.3	3.0
170°-180°	97.8	1.0
0°-30°	1740.8	17.8
0°-40°	2685.1	27.4
0°-60°	3389.0	34.6
0°-90°	3454.6	35.3
90°-120°	2935.6	30.0
90°-150°	5470.5	55.9
90°-180°	6330.0	64.7
0°-180°	9785.1	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°	1	3	8	7	8	3
95°	55	159	710	253	164	62
105°	222	317	1270	2413	2293	234
115°	401	479	1032	2132	2504	396
125°	558	622	1017	1682	1975	496
135°	672	743	1009	1450	1635	520
145°	785	843	1007	1248	1367	492
155°	895	925	1013	1116	1160	412
165°	977	986	1017	1056	1068	275
175°	1021	1021	1022	1030	1028	97
180°	1026	1026	1026	1026	1026	



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**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°	1.9	3.1	3.4	3.2	3.4
90°	1.1	3.1	8.4	7.4	8.4
92.5°	17.9	65.3	200.7	65.3	52.3
95°	54.8	158.9	710.5	253.1	164.4
97.5°	99.5	209.6	1219.0	737.4	457.1
100°	130.7	235.8	1410.4	1259.5	834.9
102.5°	166.1	268.8	1389.3	1855.9	1438.7
105°	222.4	317.2	1270.2	2413.3	2292.7
107.5°	277.9	364.9	1154.0	2465.4	2598.0
110°	314.1	398.6	1098.4	2404.8	2651.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	348.7	430.7	1064.7	2299.2	2614.8
115°	400.6	478.9	1032.0	2132.5	2503.5
117.5°	451.0	524.1	1019.5	1968.6	2345.4
120°	483.8	552.9	1016.2	1873.1	2240.0
122.5°	513.4	580.8	1016.2	1790.7	2131.2
125°	557.6	621.5	1017.2	1681.7	1975.4
127.5°	595.2	660.3	1016.0	1601.3	1856.9
130°	618.8	684.7	1015.1	1552.7	1783.6
132.5°	639.8	707.5	1012.6	1510.9	1720.3
135°	671.5	742.6	1008.8	1450.4	1634.9
137.5°	704.8	775.3	1006.5	1387.4	1554.2
140°	728.4	796.4	1005.6	1347.6	1505.3
142.5°	752.0	815.9	1005.6	1305.1	1447.9
145°	785.3	843.0	1006.7	1247.6	1367.2
147.5°	820.3	868.3	1008.2	1197.6	1287.9
150°	842.2	884.5	1009.8	1168.6	1244.9
152.5°	864.2	901.5	1010.7	1144.7	1207.8
155°	894.9	924.8	1013.0	1116.2	1159.5
157.5°	922.6	944.2	1015.3	1093.8	1125.2
160°	940.3	957.8	1016.2	1081.0	1105.8
162.5°	955.5	969.7	1016.2	1070.8	1088.9
165°	977.2	986.4	1017.2	1056.5	1067.8
167.5°	995.5	1000.0	1018.5	1045.4	1051.6
170°	1005.6	1007.7	1019.3	1039.4	1041.5
172.5°	1013.2	1014.5	1021.9	1035.2	1035.6
175°	1021.4	1021.4	1022.5	1029.8	1027.8
177.5°	1025.7	1024.8	1024.0	1029.0	1025.7
180°	1025.7	1025.7	1025.7	1025.7	1025.7



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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	3.72	4.38	4.82	5.46	6.93	3.38	4.03	4.48	5.11	6.59
	3H	4.22	4.80	5.33	5.89	7.38	3.88	4.46	4.99	5.55	7.04
	4H	4.48	5.03	5.60	6.12	7.62	4.12	4.67	5.24	5.76	7.26
	6H	4.71	5.21	5.83	6.30	7.81	4.32	4.83	5.45	5.92	7.43
	8H	4.78	5.26	5.91	6.37	7.87	4.39	4.86	5.51	5.97	7.47
	12H	4.83	5.28	5.96	6.38	7.91	4.42	4.87	5.55	5.97	7.49
4H	2H	3.72	4.27	4.85	5.36	6.86	3.41	3.96	4.53	5.04	6.55
	3H	4.43	4.88	5.56	6.00	7.51	4.13	4.58	5.25	5.69	7.21
	4H	4.83	5.24	5.96	6.35	7.88	4.50	4.91	5.63	6.02	7.55
	6H	5.20	5.56	6.34	6.68	8.21	4.84	5.20	5.98	6.32	7.85
	8H	5.34	5.67	6.48	6.79	8.33	4.96	5.29	6.10	6.41	7.95
	12H	5.43	5.73	6.58	6.87	8.41	5.02	5.32	6.18	6.46	8.00
8H	4H	4.91	5.24	6.04	6.36	7.90	4.61	4.94	5.74	6.06	7.60
	6H	5.41	5.69	6.57	6.85	8.38	5.08	5.35	6.23	6.51	8.05
	8H	5.64	5.88	6.80	7.02	8.58	5.28	5.52	6.44	6.66	8.22
	12H	5.82	6.03	6.98	7.17	8.76	5.41	5.62	6.58	6.76	8.35
12H	4H	4.88	5.17	6.03	6.31	7.85	4.58	4.88	5.73	6.01	7.56
	6H	5.43	5.67	6.60	6.81	8.37	5.11	5.35	6.27	6.49	8.04
	8H	5.68	5.89	6.85	7.03	8.62	5.33	5.54	6.49	6.68	8.27