

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: P854333

Luminaire Tested: SQ2-WBM-025U-075D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854333
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G3-2104-222-6)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBM-025U-075D-940-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

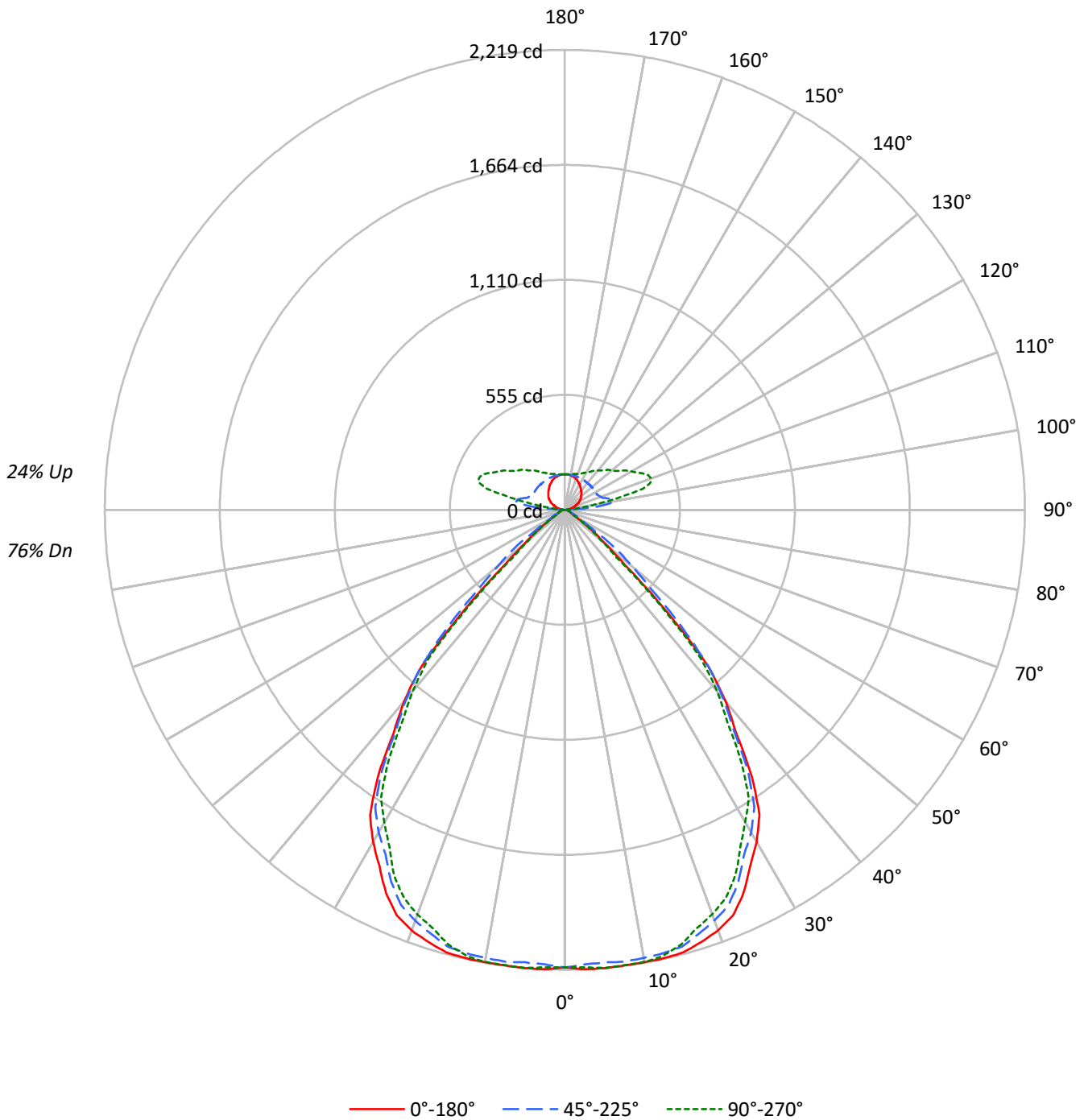
Lumens per Lamp: N/A
Luminaire Lumens: 4517.5 lumens
Efficiency: N/A
Efficacy: 129.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.18 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 35
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	50	30	10	0	
RCR																						
0	113	113	113	113	108	108	108	108	98	98	98	89	89	89	80	80	80	76				
1	106	103	100	97	101	99	96	93	90	88	86	82	81	80	75	74	73	70				
2	99	93	88	84	95	90	85	82	83	79	76	76	73	71	70	68	66	63				
3	93	85	79	74	89	82	76	72	76	71	68	70	67	64	65	62	60	57				
4	86	77	71	66	83	75	69	64	69	65	61	64	61	57	60	57	54	52				
5	81	71	64	59	77	68	62	57	64	59	55	60	55	52	56	52	49	47				
6	75	65	58	53	72	63	56	52	59	53	49	55	51	47	52	48	45	43				
7	71	60	53	48	68	58	51	47	54	49	45	51	46	43	48	44	41	39				
8	66	55	48	43	63	53	47	43	50	45	41	47	43	39	45	41	38	36				
9	62	51	44	40	60	50	43	39	47	41	38	44	40	36	42	38	35	33				
10	59	47	41	36	56	46	40	36	44	38	35	41	37	33	39	35	32	31				

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	4.7
10°-20°	617.2	13.7
20°-30°	912.6	20.2
30°-40°	944.2	20.9
40°-50°	568.0	12.6
50°-60°	135.9	3.0
60°-70°	37.1	0.8
70°-80°	20.8	0.5
80°-90°	7.0	0.2
90°-100°	69.4	1.5
100°-110°	215.7	4.8
110°-120°	211.0	4.7
120°-130°	172.3	3.8
130°-140°	140.9	3.1
140°-150°	110.0	2.4
150°-160°	79.4	1.8
160°-170°	48.5	1.1
170°-180°	16.4	0.4
0°-30°	1740.8	38.5
0°-40°	2685.1	59.4
0°-60°	3389.0	75.0
0°-90°	3453.9	76.5
90°-120°	496.1	11.0
90°-150°	919.3	20.4
90°-180°	1064.0	23.6
0°-180°	4517.5	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	1	3	3	3	1
95°	10	28	127	47	30	11
105°	38	53	212	405	387	40
115°	67	80	172	356	416	66
125°	94	104	170	280	328	83
135°	112	125	169	241	271	87
145°	131	142	169	209	227	83
155°	150	156	170	187	193	69
165°	165	166	171	177	179	46
175°	171	171	171	172	171	16
180°	171	171	171	171	171	



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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°	1.7	2.7	2.3	2.3	2.3
90°	0.0	1.0	3.2	3.2	3.2
92.5°	3.4	11.8	40.2	13.2	10.7
95°	9.5	28.0	127.2	46.9	30.5
97.5°	17.2	36.4	210.7	131.2	82.6
100°	23.1	40.6	237.6	222.3	148.2
102.5°	29.0	45.7	232.6	317.4	249.2
105°	37.8	53.3	212.4	405.4	386.9
107.5°	46.7	61.1	193.0	412.2	432.5
110°	52.6	67.0	182.9	402.5	442.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	58.5	72.0	177.9	385.1	435.9
115°	67.3	79.6	172.4	355.7	416.3
117.5°	75.9	87.2	170.1	327.5	389.6
120°	81.0	92.3	169.3	311.5	371.1
122.5°	86.0	97.3	170.1	297.9	352.6
125°	93.6	103.9	170.3	279.7	328.0
127.5°	99.7	110.2	170.3	266.1	307.2
130°	103.0	114.3	170.3	258.4	295.4
132.5°	107.2	118.5	169.5	251.6	286.2
135°	112.5	124.8	169.3	241.4	271.2
137.5°	118.6	129.9	169.3	231.3	258.4
140°	122.0	133.3	169.3	224.5	249.2
142.5°	126.2	136.6	169.3	217.7	239.9
145°	131.4	141.7	169.3	208.6	227.1
147.5°	137.7	146.6	170.3	200.1	214.7
150°	141.9	149.1	170.3	195.8	207.1
152.5°	145.3	151.7	170.3	191.6	201.2
155°	150.3	155.5	170.3	187.3	193.4
157.5°	155.4	159.3	170.3	183.4	187.4
160°	158.8	161.8	170.3	180.9	184.0
162.5°	161.3	163.5	170.3	179.2	181.5
165°	165.1	166.1	171.4	176.7	178.7
167.5°	167.4	167.6	170.3	175.2	176.2
170°	168.2	169.2	170.3	173.5	174.5
172.5°	169.9	170.1	171.2	172.6	172.8
175°	171.4	171.4	171.4	172.4	171.4
177.5°	171.4	171.4	171.4	171.4	171.4
180°	171.4	171.4	171.4	171.4	171.4



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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	7.63	8.53	8.36	9.24	10.09	7.29	8.18	8.01	8.90	9.75
	3H	8.14	8.93	8.88	9.66	10.54	7.80	8.60	8.54	9.32	10.21
	4H	8.41	9.15	9.17	9.89	10.79	8.05	8.79	8.81	9.53	10.43
	6H	8.65	9.32	9.42	10.07	10.98	8.26	8.94	9.03	9.69	10.60
	8H	8.73	9.37	9.51	10.13	11.04	8.33	8.97	9.11	9.74	10.65
	12H	8.78	9.39	9.56	10.15	11.08	8.37	8.98	9.15	9.74	10.67
4H	2H	7.65	8.39	8.42	9.13	10.03	7.34	8.08	8.10	8.82	9.71
	3H	8.38	8.98	9.15	9.76	10.67	8.07	8.68	8.84	9.45	10.36
	4H	8.78	9.32	9.56	10.10	11.04	8.45	9.00	9.24	9.77	10.71
	6H	9.16	9.63	9.96	10.43	11.38	8.80	9.27	9.61	10.07	11.02
	8H	9.30	9.74	10.11	10.53	11.49	8.92	9.36	9.73	10.15	11.11
	12H	9.40	9.79	10.22	10.61	11.57	8.99	9.38	9.81	10.20	11.16
8H	4H	8.87	9.30	9.67	10.10	11.06	8.57	9.00	9.37	9.80	10.75
	6H	9.37	9.73	10.21	10.57	11.53	9.04	9.39	9.87	10.23	11.19
	8H	9.60	9.91	10.44	10.75	11.73	9.23	9.55	10.08	10.39	11.36
	12H	9.78	10.06	10.62	10.88	11.92	9.37	9.65	10.21	10.48	11.51
12H	4H	8.84	9.23	9.66	10.05	11.01	8.55	8.93	9.37	9.75	10.72
	6H	9.39	9.70	10.23	10.54	11.52	9.06	9.38	9.91	10.22	11.19
	8H	9.64	9.92	10.49	10.75	11.79	9.29	9.57	10.13	10.39	11.43