

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: P853563

Luminaire Tested: SQ2-BBM-150U-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P853563  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-14, G3-2104-222-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-BBM-150U-075D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

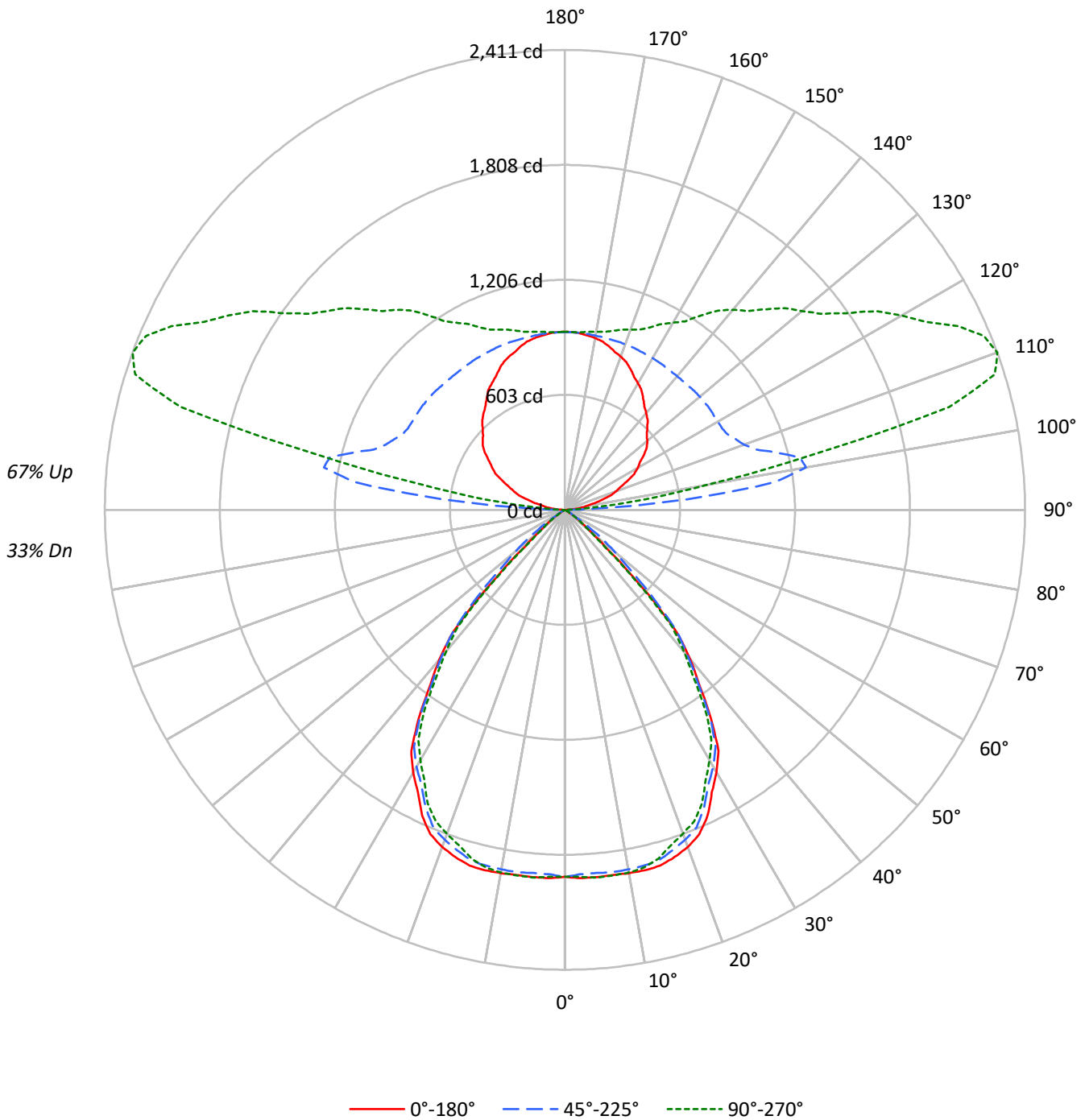
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8633.4 lumens  
Efficiency: N/A  
Efficacy: 102.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.17 / 1.16  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 84.1  
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	95	92	88	85	86	83	80	78	67	65	63	52	51	50	38	37	37	31
2	88	82	76	72	79	74	70	66	60	57	55	47	45	44	35	34	33	28
3	81	73	67	62	73	67	61	57	54	51	48	43	41	39	33	31	30	25
4	75	66	59	53	68	60	54	49	49	45	42	39	37	34	30	28	27	23
5	69	59	52	47	63	54	48	43	45	40	37	36	33	31	28	26	25	21
6	64	53	46	41	58	49	43	38	41	36	33	33	30	28	26	24	22	19
7	60	49	41	36	54	45	39	34	37	33	29	30	27	25	24	22	20	18
8	55	44	37	33	50	41	35	31	34	30	27	28	25	23	22	20	19	16
9	52	41	34	29	47	38	32	28	32	27	24	26	23	21	21	19	17	15
10	48	37	31	26	44	35	29	25	29	25	22	24	21	19	19	17	16	14

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

	0°	45°	90°
0°	31068	31068	31068
5°	31311	30968	31358
10°	31704	31373	31657
15°	32276	31793	31632
20°	32318	31639	31060
25°	31518	30713	30284
30°	29628	28981	28247
35°	26296	26087	25310
40°	21566	21201	20409
45°	12858	15120	12065
50°	4014	8390	3795
55°	1517	2981	1517
60°	94	840	32
65°	0	38	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 15120 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.0	2.1
10°-20°	538.9	6.2
20°-30°	792.8	9.2
30°-40°	810.3	9.4
40°-50°	466.8	5.4
50°-60°	80.5	0.9
60°-70°	2.9	0.0
70°-80°	0.0	0.0
80°-90°	1.3	0.0
90°-100°	355.3	4.1
100°-110°	1163.6	13.5
110°-120°	1150.4	13.3
120°-130°	940.4	10.9
130°-140°	767.4	8.9
140°-150°	597.2	6.9
150°-160°	430.0	5.0
160°-170°	263.1	3.0
170°-180°	88.9	1.0
0°-30°	1515.7	17.6
0°-40°	2326.0	26.9
0°-60°	2873.3	33.3
0°-90°	2877.6	33.3
90°-120°	2669.3	30.9
90°-150°	4974.2	57.6
90°-180°	5756.0	66.7
0°-180°	8633.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1924	1924	1924	1924	1924	
5°	1932	1927	1911	1937	1935	184
15°	1931	1947	1902	1905	1892	544
25°	1769	1785	1724	1706	1700	807
35°	1334	1344	1324	1298	1284	824
45°	563	647	662	625	528	436
55°	54	61	106	60	54	57
65°	0	0	1	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	1	3	8	7	8	3
95°	50	144	646	230	150	57
105°	202	288	1155	2194	2085	213
115°	364	435	938	1939	2276	360
125°	507	565	925	1529	1796	451
135°	611	675	917	1319	1487	472
145°	714	766	915	1134	1243	447
155°	814	841	921	1015	1054	375
165°	888	897	925	961	971	250
175°	929	929	930	936	934	88
180°	933	933	933	933	933	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1924.2	1924.2	1924.2	1924.2	1924.2
2.5°	1932.6	1927.4	1911.8	1929.5	1925.7
5°	1931.9	1927.2	1910.7	1936.6	1934.8
7.5°	1930.7	1927.5	1915.9	1937.2	1932.4
10°	1933.8	1932.9	1913.6	1935.6	1930.9
12.5°	1935.3	1941.2	1911.3	1928.6	1920.1
15°	1930.9	1946.9	1902.0	1904.6	1892.4
17.5°	1909.3	1931.9	1872.2	1861.2	1843.9
20°	1880.9	1907.2	1841.4	1822.8	1807.7
22.5°	1840.8	1864.9	1802.1	1778.9	1766.9
25°	1769.2	1785.2	1724.0	1706.5	1699.9
27.5°	1667.7	1672.3	1626.2	1604.4	1595.9
30°	1589.2	1589.2	1554.5	1531.1	1515.1
32.5°	1497.6	1495.3	1470.6	1444.8	1428.8
35°	1334.1	1344.5	1323.5	1298.2	1284.1
37.5°	1157.2	1161.2	1145.3	1118.0	1106.2
40°	1023.2	1024.1	1005.9	986.2	968.3
42.5°	866.9	885.9	868.8	837.8	830.5
45°	563.1	646.9	662.2	625.4	528.4
47.5°	283.0	387.3	452.6	351.5	248.9
50°	159.8	221.9	334.0	185.9	151.1
52.5°	106.7	134.1	231.6	121.6	101.8
55°	53.9	61.4	105.9	59.6	53.9
57.5°	18.3	28.5	46.0	29.4	20.2
60°	2.9	12.3	26.0	9.4	1.0
62.5°	0.6	3.2	16.0	2.6	0.2
65°	0.0	0.0	1.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.2	0.6	1.5	1.3	1.5
90°	1.0	2.8	7.7	6.7	7.7
92.5°	16.3	59.4	182.5	59.3	47.5
95°	49.8	144.5	646.0	230.1	149.5
97.5°	90.5	190.6	1108.4	670.5	415.6
100°	118.9	214.4	1282.4	1145.2	759.1
102.5°	151.1	244.4	1263.3	1687.5	1308.1
105°	202.2	288.5	1155.0	2194.3	2084.7
107.5°	252.7	331.8	1049.3	2241.7	2362.3
110°	285.6	362.5	998.7	2186.6	2410.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	317.1	391.7	968.1	2090.6	2377.6
115°	364.2	435.4	938.4	1939.0	2276.4
117.5°	410.0	476.6	927.0	1790.0	2132.6
120°	439.9	502.7	924.0	1703.1	2036.8
122.5°	466.8	528.1	924.0	1628.2	1937.9
125°	507.0	565.1	924.9	1529.1	1796.2
127.5°	541.2	600.4	923.8	1456.0	1688.5
130°	562.6	622.6	923.0	1411.8	1621.7
132.5°	581.8	643.3	920.7	1373.8	1564.2
135°	610.6	675.2	917.3	1318.8	1486.6
137.5°	640.8	704.9	915.2	1261.5	1413.2
140°	662.3	724.2	914.4	1225.3	1368.7
142.5°	683.8	741.9	914.4	1186.7	1316.6
145°	714.1	766.5	915.3	1134.4	1243.1
147.5°	745.9	789.6	916.7	1089.0	1171.1
150°	765.8	804.2	918.2	1062.6	1132.0
152.5°	785.8	819.7	919.0	1040.9	1098.2
155°	813.7	840.9	921.1	1015.0	1054.3
157.5°	838.9	858.5	923.2	994.6	1023.1
160°	855.0	870.9	924.0	983.0	1005.4
162.5°	868.8	881.7	924.0	973.6	990.1
165°	888.5	896.9	924.9	960.6	970.9
167.5°	905.2	909.3	926.1	950.6	956.2
170°	914.4	916.3	926.8	945.1	947.0
172.5°	921.3	922.4	929.1	941.2	941.6
175°	928.8	928.8	929.7	936.4	934.5
177.5°	932.6	931.8	931.1	935.6	932.6
180°	932.6	932.6	932.6	932.6	932.6



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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	0.00	0.00	0.00	0.00	1.09	0.00	0.00	0.00	0.00	0.71
	3H	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.00	0.00	0.46
	4H	0.00	0.00	0.00	0.00	0.71	0.00	0.00	0.00	0.00	0.33
	6H	0.00	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.19
	8H	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00	0.11
	12H	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.04
4H	2H	0.00	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.00	0.34
	3H	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.08
	4H	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00