

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: NEO-RAY

Report Number: P1030810

Luminaire Tested: S123DIW-B340D1320UB2750-4F0-XX-W2A-D_2700K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1030810
REPORT IS A COMBINATION OF REPORTS P991263 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1320UB2750-4F0-XX-W2A-D_2700K
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

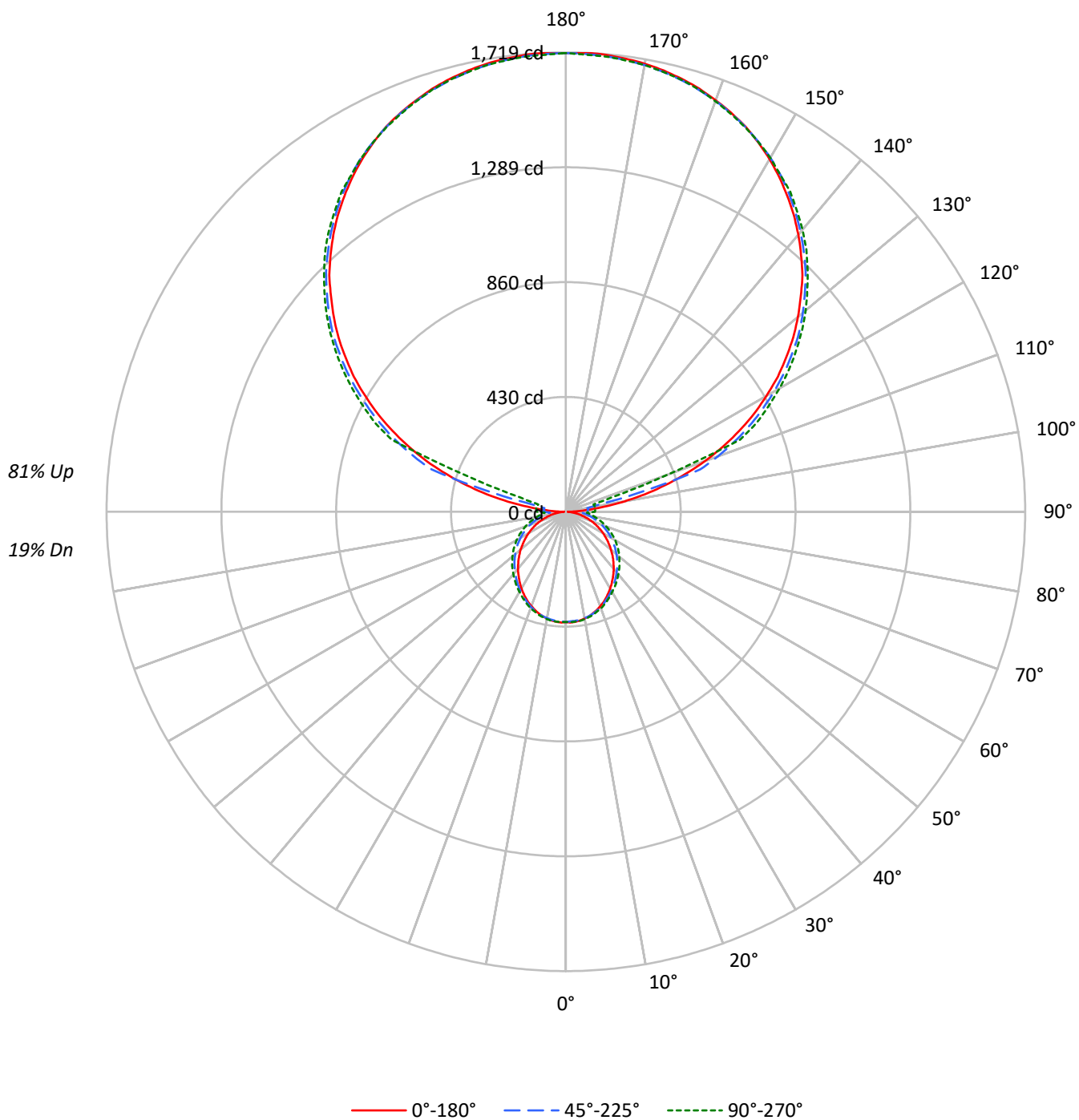
Lumens per Lamp: N/A
Luminaire Lumens: 6623.9 lumens
Efficiency: N/A
Efficacy: 120.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.1
Input Voltage (V):
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28	19		
1	90	86	82	79	80	76	73	70	57	55	53	40	39	37	24	23	23	15		
2	82	75	69	64	72	66	61	57	50	47	44	35	33	31	21	20	19	13		
3	75	66	59	53	66	58	52	47	44	40	36	31	28	26	18	17	16	10		
4	68	58	50	44	60	51	45	40	39	34	31	27	24	22	16	15	13	9		
5	62	51	43	38	55	45	39	34	34	30	26	24	21	19	15	13	12	8		
6	57	46	38	32	50	41	34	29	31	26	23	22	19	16	13	11	10	7		
7	53	41	33	28	46	36	30	25	28	23	20	20	17	14	12	10	9	6		
8	49	37	30	25	43	33	27	22	25	21	17	18	15	13	11	9	8	5		
9	45	34	26	22	40	30	24	20	23	18	15	16	13	11	10	8	7	5		
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	9	8	6	4		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4442	4442	4442
5°	4455	4312	4308
10°	4413	4196	4164
15°	4355	4066	4009
20°	4272	3923	3844
25°	4170	3760	3672
30°	4065	3614	3500
35°	3948	3460	3360
40°	3836	3319	3212
45°	3713	3184	3089
50°	3589	3049	2956
55°	3454	2910	2835
60°	3320	2769	2710
65°	3184	2617	2564
70°	2980	2450	2412
75°	2720	2256	2257
80°	2416	2061	2080
85°	2113	1902	1953

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3713 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	0.6
10°-20°	111.6	1.7
20°-30°	166.9	2.5
30°-40°	199.3	3.0
40°-50°	208.5	3.1
50°-60°	195.6	3.0
60°-70°	163.4	2.5
70°-80°	116.9	1.8
80°-90°	73.0	1.1
90°-100°	104.2	1.6
100°-110°	324.8	4.9
110°-120°	738.7	11.2
120°-130°	922.7	13.9
130°-140°	978.2	14.8
140°-150°	910.7	13.7
150°-160°	733.7	11.1
160°-170°	473.5	7.1
170°-180°	163.2	2.5
0°-30°	317.7	4.8
0°-40°	516.9	7.8
0°-60°	921.1	13.9
0°-90°	1274.3	19.2
90°-120°	1167.7	17.6
90°-150°	3979.3	60.1
90°-180°	5350.0	80.8
0°-180°	6623.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	413	413	413	413	413	
5°	413	412	410	413	413	39
15°	393	395	394	399	398	111
25°	355	360	361	367	367	164
35°	306	313	319	326	327	191
45°	250	261	272	280	284	193
55°	191	206	222	234	237	171
65°	132	149	169	182	187	130
75°	72	93	115	130	135	76
85°	22	44	68	84	88	23
90°	7	42	81	102	109	9
95°	83	48	84	107	111	97
105°	384	408	313	100	106	407
115°	715	728	756	779	788	706
125°	1006	1016	1035	1047	1052	899
135°	1252	1259	1269	1281	1280	964
145°	1444	1453	1455	1461	1463	904
155°	1590	1588	1589	1596	1588	733
165°	1677	1673	1672	1682	1673	474
175°	1717	1710	1712	1720	1710	163
180°	1717	1717	1717	1717	1717	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	412.7	412.7	412.7	412.7	412.7
2.5°	414.9	413.6	410.0	413.6	413.2
5°	413.2	412.3	409.6	413.2	412.7
7.5°	410.0	410.0	407.3	411.8	411.4
10°	405.5	406.4	404.2	408.7	407.8
12.5°	400.1	401.5	400.1	404.2	403.3
15°	393.4	394.7	394.3	398.8	398.3
17.5°	385.3	388.0	387.5	391.6	390.7
20°	376.3	379.0	379.9	383.9	384.4
22.5°	366.8	369.5	370.9	376.3	375.8
25°	355.2	359.7	361.0	366.8	366.8
27.5°	343.9	348.9	351.6	356.5	357.0
30°	331.8	337.6	341.2	346.6	346.6
32.5°	318.3	325.0	330.0	335.8	337.2
35°	305.7	312.9	318.7	325.5	327.3
37.5°	292.2	300.3	307.1	314.7	316.0
40°	278.7	286.8	295.8	303.5	305.3
42.5°	263.9	274.2	283.7	292.2	294.9
45°	250.0	260.7	272.0	280.5	284.1
47.5°	235.1	247.3	259.8	269.3	272.0
50°	220.7	233.3	247.3	257.6	260.7
52.5°	205.5	218.9	234.7	245.5	249.5
55°	190.6	205.5	221.6	233.8	237.4
57.5°	176.2	191.5	209.0	221.2	225.2
60°	160.9	177.1	195.6	208.1	213.1
62.5°	146.6	163.2	183.0	195.6	200.1
65°	131.7	149.3	169.0	182.5	187.0
67.5°	116.9	135.3	155.1	169.9	173.5
70°	101.2	120.5	142.1	156.4	160.9
72.5°	86.8	106.1	128.6	143.4	147.9
75°	71.5	92.6	115.1	129.9	135.3
77.5°	58.4	79.6	102.1	117.8	121.8
80°	44.5	66.5	89.9	105.2	109.7
82.5°	32.4	54.8	78.7	94.0	98.5
85°	22.0	44.5	68.3	83.6	88.1
87.5°	13.5	36.0	58.9	74.2	78.7
90°	7.1	41.9	81.4	101.8	108.9
92.5°	34.7	46.4	80.4	104.1	109.5
95°	82.7	48.0	84.0	106.9	111.4
97.5°	146.1	126.6	82.6	106.3	112.1
100°	219.5	259.5	81.2	104.4	110.2
102.5°	303.3	332.5	130.8	101.3	108.3
105°	383.7	408.5	313.0	99.9	106.5
107.5°	468.6	489.6	527.1	342.9	179.8
110°	553.7	572.0	604.0	573.6	394.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	635.3	650.5	681.7	704.3	705.9
115°	715.2	728.2	755.9	779.4	788.1
117.5°	794.2	806.8	828.4	849.4	854.3
120°	866.5	880.2	898.9	919.4	922.6
122.5°	940.5	950.3	969.3	985.6	990.1
125°	1006.3	1016.5	1034.7	1046.7	1052.4
127.5°	1072.7	1082.5	1100.0	1112.9	1113.5
130°	1133.9	1143.7	1157.8	1171.4	1171.5
132.5°	1192.1	1202.4	1212.9	1226.1	1225.5
135°	1252.1	1259.2	1269.3	1281.3	1279.6
137.5°	1303.1	1312.8	1318.6	1332.1	1331.8
140°	1353.6	1361.3	1366.5	1378.3	1378.1
142.5°	1400.8	1408.1	1411.9	1421.5	1420.0
145°	1444.2	1452.7	1455.3	1461.4	1463.2
147.5°	1485.9	1492.2	1494.8	1498.6	1494.1
150°	1524.1	1528.0	1530.5	1533.1	1530.1
152.5°	1558.6	1559.8	1561.1	1566.2	1559.8
155°	1590.5	1587.9	1589.2	1595.6	1587.9
157.5°	1616.0	1616.0	1614.7	1622.3	1612.1
160°	1638.9	1637.6	1636.4	1644.0	1635.1
162.5°	1660.6	1656.8	1655.5	1664.4	1656.8
165°	1677.2	1673.4	1672.1	1682.3	1673.4
167.5°	1691.2	1686.1	1686.1	1696.3	1686.1
170°	1702.7	1697.6	1697.6	1707.8	1697.6
172.5°	1710.3	1704.0	1705.2	1715.4	1704.0
175°	1716.7	1710.3	1711.6	1720.5	1710.3
177.5°	1719.3	1712.9	1714.2	1724.4	1711.6
180°	1716.7	1716.7	1716.7	1716.7	1716.7

(END OF REPORT)