

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: P1031612

Luminaire Tested: S123DIW-B340D1535UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031612
REPORT IS A COMBINATION OF REPORTS P991315 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1535UB27-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

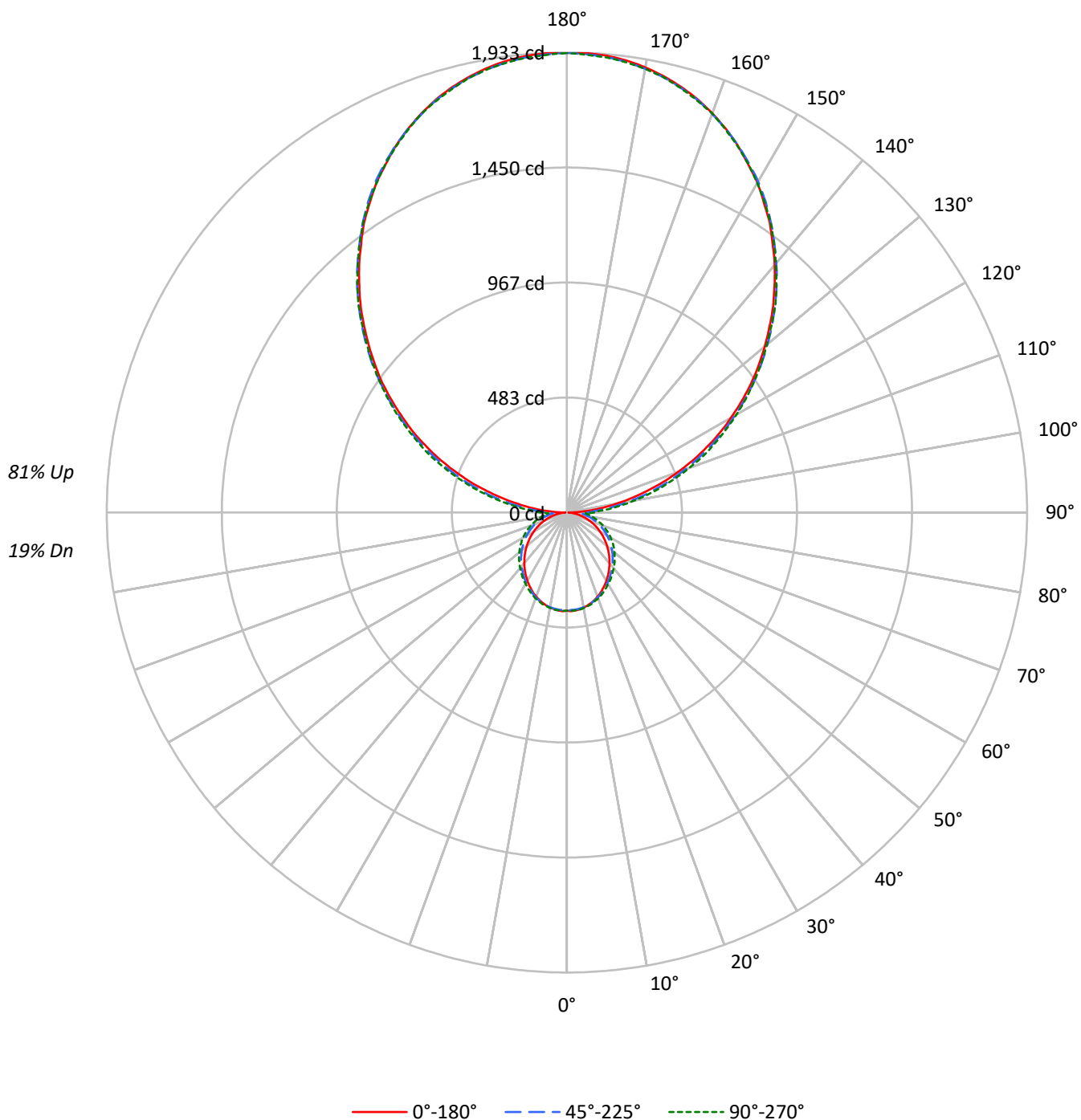
Lumens per Lamp: N/A
Luminaire Lumens: 6741.9 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 65.2
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
RCR																	
0	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28
1	90	86	82	79	80	76	73	70	57	55	53	40	38	37	24	23	22
2	82	75	69	64	72	66	61	57	50	46	44	35	33	31	21	19	19
3	75	66	59	53	66	58	52	47	44	40	36	30	28	26	18	17	16
4	68	58	50	44	60	51	45	40	39	34	31	27	24	22	16	15	13
5	62	51	43	38	55	45	39	34	34	30	26	24	21	19	14	13	11
6	57	46	38	32	50	41	34	29	31	26	23	22	19	16	13	11	10
7	53	41	33	28	46	36	30	25	28	23	20	19	16	14	12	10	9
8	49	37	30	25	43	33	27	22	25	21	17	18	15	13	11	9	8
9	45	34	26	22	40	30	24	19	23	18	15	16	13	11	10	8	7
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	9	7	6

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	2.9
60°-70°	163.4	2.4
70°-80°	116.9	1.7
80°-90°	73.6	1.1
90°-100°	168.0	2.5
100°-110°	408.4	6.1
110°-120°	662.0	9.8
120°-130°	854.9	12.7
130°-140°	952.7	14.1
140°-150°	932.3	13.8
150°-160°	784.0	11.6
160°-170°	521.9	7.7
170°-180°	182.8	2.7
0°-30°	317.7	4.7
0°-40°	516.9	7.7
0°-60°	921.1	13.7
0°-90°	1275.0	18.9
90°-120°	1238.4	18.4
90°-150°	3978.3	59.0
90°-180°	5467.0	81.1
0°-180°	6741.9	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	45	87	109	116	11
95°	94	123	157	177	181	102
105°	345	359	392	404	412	369
115°	647	657	670	682	684	640
125°	945	949	960	963	960	843
135°	1225	1234	1237	1239	1238	944
145°	1486	1488	1493	1495	1491	928
155°	1701	1701	1702	1708	1698	783
165°	1852	1848	1848	1857	1846	522
175°	1927	1920	1920	1930	1919	183
180°	1931	1931	1931	1931	1931	

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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°	7.3	44.6	87.2	108.6	116.1
92.5°	50.9	79.3	110.9	130.3	131.3
95°	94.4	122.6	156.8	176.7	181.2
97.5°	151.7	175.4	205.6	226.7	229.7
100°	210.3	233.8	262.1	279.7	287.2
102.5°	278.2	295.3	326.2	343.3	346.3
105°	344.9	358.8	391.7	404.3	411.5
107.5°	423.3	434.3	458.8	475.6	478.0
110°	495.7	506.9	527.9	545.7	546.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	571.6	579.4	596.5	615.3	619.4
115°	646.9	656.9	670.1	682.4	684.5
117.5°	724.3	729.4	741.7	752.5	751.5
120°	795.2	806.5	813.8	822.6	822.8
122.5°	869.5	876.5	887.4	892.7	891.4
125°	944.9	949.4	959.5	962.8	960.0
127.5°	1014.7	1023.4	1031.5	1031.4	1028.6
130°	1084.5	1096.2	1100.6	1103.1	1095.2
132.5°	1153.8	1166.0	1169.6	1170.2	1165.8
135°	1225.1	1233.7	1237.2	1239.3	1238.4
137.5°	1290.4	1297.5	1305.2	1304.8	1302.5
140°	1358.1	1365.7	1368.6	1373.8	1365.5
142.5°	1420.3	1427.5	1430.6	1434.8	1429.5
145°	1485.6	1488.2	1492.7	1494.8	1490.6
147.5°	1541.3	1547.4	1551.9	1553.2	1545.9
150°	1600.5	1603.5	1606.5	1606.5	1598.3
152.5°	1649.0	1653.6	1655.1	1658.1	1650.5
155°	1700.6	1700.6	1702.1	1708.2	1697.5
157.5°	1744.6	1743.1	1744.6	1750.6	1741.5
160°	1785.5	1782.5	1782.5	1790.1	1784.0
162.5°	1821.9	1817.4	1818.9	1826.5	1815.9
165°	1852.3	1847.7	1847.7	1856.8	1846.2
167.5°	1878.1	1872.0	1873.5	1882.6	1873.5
170°	1899.3	1893.2	1893.2	1903.9	1893.2
172.5°	1916.0	1909.9	1909.9	1919.0	1908.4
175°	1926.6	1920.5	1920.5	1929.7	1919.0
177.5°	1932.7	1926.6	1926.6	1935.7	1925.1
180°	1931.2	1931.2	1931.2	1931.2	1931.2

(END OF REPORT)