

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: P1031611

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031611
REPORT IS A COMBINATION OF REPORTS P991314 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-D
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

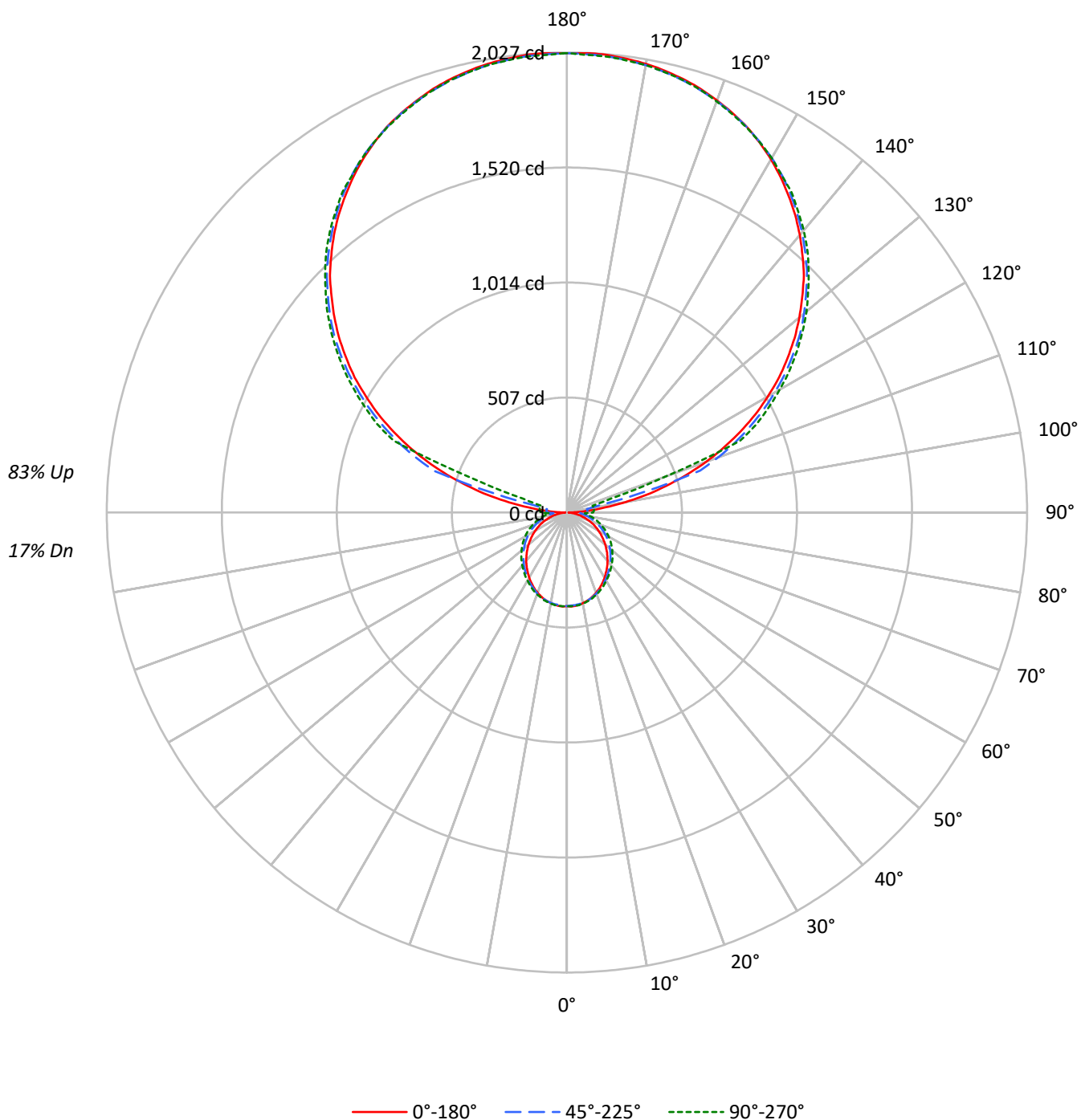
Lumens per Lamp: N/A
Luminaire Lumens: 7561.9 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	50	30	10
RCR																				
0	99	99	99	99	87	87	87	87	65	65	65	44	44	44	26	26	26	17		
1	90	86	82	78	79	75	72	69	56	54	52	38	37	36	22	21	21	13		
2	82	75	69	64	72	66	61	57	49	46	43	33	31	30	19	18	17	11		
3	74	65	58	53	65	58	52	47	43	39	36	29	27	25	17	16	15	9		
4	68	58	50	44	59	51	44	40	38	34	30	26	23	21	15	14	12	8		
5	62	51	43	38	54	45	38	34	34	29	26	23	20	18	13	12	11	7		
6	57	46	38	32	50	40	34	29	30	26	22	21	18	16	12	11	9	6		
7	53	41	33	28	46	36	30	25	27	23	19	19	16	14	11	9	8	5		
8	49	37	29	24	43	33	26	22	25	20	17	17	14	12	10	8	7	5		
9	45	33	26	21	39	30	24	19	22	18	15	16	13	11	9	8	6	4		
10	42	30	24	19	37	27	21	17	21	16	13	14	12	10	9	7	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	0.5
10°-20°	111.6	1.5
20°-30°	166.9	2.2
30°-40°	199.3	2.6
40°-50°	208.5	2.8
50°-60°	195.6	2.6
60°-70°	163.4	2.2
70°-80°	116.9	1.5
80°-90°	73.6	1.0
90°-100°	115.1	1.5
100°-110°	377.2	5.0
110°-120°	867.1	11.5
120°-130°	1085.8	14.4
130°-140°	1152.4	15.2
140°-150°	1073.6	14.2
150°-160°	865.1	11.4
160°-170°	558.3	7.4
170°-180°	192.4	2.5
0°-30°	317.7	4.2
0°-40°	516.9	6.8
0°-60°	921.1	12.2
0°-90°	1274.9	16.9
90°-120°	1359.4	18.0
90°-150°	4671.3	61.8
90°-180°	6287.0	83.1
0°-180°	7561.9	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	44	87	108	116	9
95°	97	53	91	116	120	113
105°	452	479	363	110	117	479
115°	843	857	887	913	922	833
125°	1186	1198	1218	1230	1236	1060
135°	1476	1485	1496	1508	1506	1137
145°	1703	1713	1716	1722	1724	1066
155°	1875	1872	1874	1881	1872	864
165°	1978	1973	1972	1984	1973	559
175°	2024	2017	2018	2029	2017	193
180°	2024	2024	2024	2024	2024	

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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	44.4	86.9	108.2	115.7
92.5°	40.0	50.3	86.3	111.6	117.2
95°	96.6	52.6	91.1	115.5	120.0
97.5°	171.4	145.5	89.9	115.5	121.5
100°	258.2	302.6	88.7	113.8	119.8
102.5°	357.0	389.2	147.7	110.7	118.2
105°	451.8	479.1	363.0	109.5	116.6
107.5°	552.0	575.0	616.0	396.6	203.6
110°	652.4	672.5	707.0	669.1	457.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	748.6	765.4	799.1	823.8	824.9
115°	842.9	857.3	887.0	912.9	922.5
117.5°	936.1	950.2	973.0	995.9	1001.0
120°	1021.4	1037.2	1056.6	1078.9	1082.1
122.5°	1108.6	1120.1	1140.0	1157.4	1162.1
125°	1186.3	1198.4	1217.5	1229.9	1236.1
127.5°	1264.5	1276.2	1294.9	1308.4	1308.6
130°	1336.7	1348.4	1363.4	1377.9	1377.6
132.5°	1405.5	1417.5	1428.8	1442.9	1441.6
135°	1476.2	1484.7	1495.7	1508.3	1506.0
137.5°	1536.3	1547.9	1554.1	1568.8	1568.0
140°	1596.0	1605.0	1610.9	1623.7	1622.9
142.5°	1651.6	1660.3	1664.8	1675.1	1672.9
145°	1702.8	1712.9	1715.9	1722.5	1724.3
147.5°	1752.0	1759.5	1762.5	1766.8	1761.1
150°	1797.1	1801.6	1804.6	1807.6	1804.0
152.5°	1837.7	1839.2	1840.7	1846.7	1839.2
155°	1875.3	1872.3	1873.8	1881.3	1872.3
157.5°	1905.4	1905.4	1903.9	1912.9	1900.9
160°	1932.5	1931.0	1929.5	1938.5	1928.0
162.5°	1958.0	1953.5	1952.0	1962.5	1953.5
165°	1977.6	1973.1	1971.6	1983.6	1973.1
167.5°	1994.1	1988.1	1988.1	2000.1	1988.1
170°	2007.7	2001.6	2001.6	2013.7	2001.6
172.5°	2016.7	2009.2	2010.7	2022.7	2009.2
175°	2024.2	2016.7	2018.2	2028.7	2016.7
177.5°	2027.2	2019.7	2021.2	2033.2	2018.2
180°	2024.2	2024.2	2024.2	2024.2	2024.2

(END OF REPORT)