

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: P1031623

Luminaire Tested: S123DIW-B340D1535UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031623
REPORT IS A COMBINATION OF REPORTS P991353 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1535UB35-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

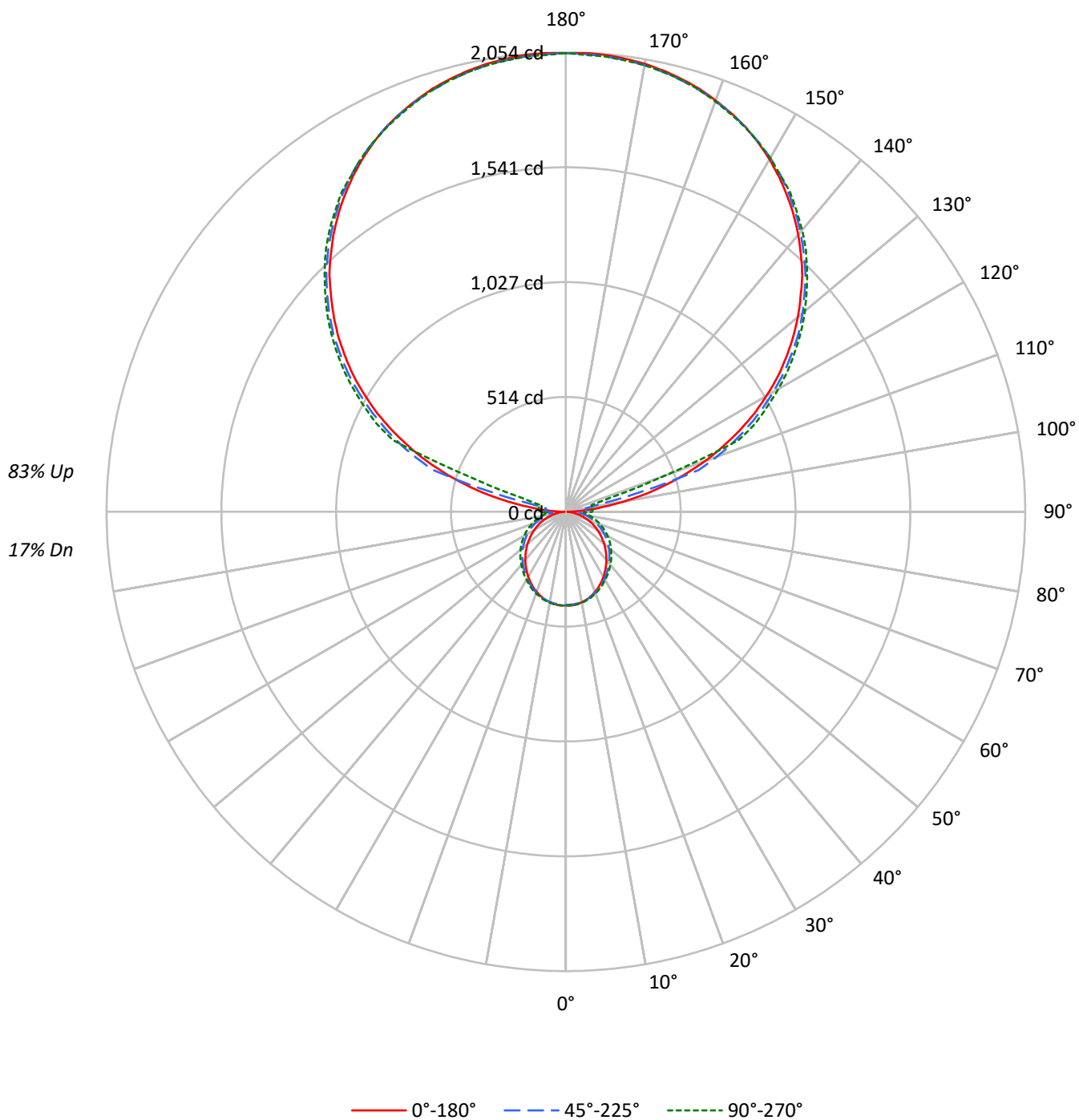
Lumens per Lamp: N/A
Luminaire Lumens: 7660.0 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 65.2
Input Voltage (V):
Input Current (A_{in}): 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	99	99	99	99	87	87	87	87	65	65	65	44	44	44	26	26	26
1	90	86	82	78	79	75	72	69	56	54	52	38	37	36	22	21	21
2	82	75	69	64	72	66	61	57	49	46	43	33	31	30	19	18	17
3	74	65	58	53	65	58	52	47	43	39	36	29	27	25	17	16	15
4	68	58	50	44	59	51	44	40	38	34	30	26	23	21	15	14	12
5	62	51	43	38	54	45	38	34	34	29	26	23	20	18	13	12	11
6	57	46	38	32	50	40	34	29	30	26	22	21	18	16	12	11	9
7	53	41	33	28	46	36	30	25	27	23	19	19	16	14	11	9	8
8	49	37	29	24	43	33	26	22	25	20	17	17	14	12	10	8	7
9	45	33	26	21	39	30	24	19	22	18	15	16	13	11	9	8	6
10	42	30	24	19	37	27	21	17	21	16	13	14	12	10	9	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4500	4500	4500
5°	4512	4368	4365
10°	4470	4250	4217
15°	4411	4119	4061
20°	4327	3973	3894
25°	4224	3809	3720
30°	4118	3660	3545
35°	4000	3505	3403
40°	3885	3363	3253
45°	3760	3225	3129
50°	3636	3089	2995
55°	3499	2948	2872
60°	3363	2805	2746
65°	3225	2652	2597
70°	3019	2481	2444
75°	2754	2286	2287
80°	2448	2088	2107
85°	2142	1927	1979

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3760 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	0.5
10°-20°	113.1	1.5
20°-30°	169.1	2.2
30°-40°	201.9	2.6
40°-50°	211.2	2.8
50°-60°	198.2	2.6
60°-70°	165.5	2.2
70°-80°	118.4	1.5
80°-90°	74.5	1.0
90°-100°	116.6	1.5
100°-110°	382.1	5.0
110°-120°	878.4	11.5
120°-130°	1099.9	14.4
130°-140°	1167.3	15.2
140°-150°	1087.5	14.2
150°-160°	876.3	11.4
160°-170°	565.5	7.4
170°-180°	194.9	2.5
0°-30°	321.8	4.2
0°-40°	523.6	6.8
0°-60°	933.0	12.2
0°-90°	1291.5	16.9
90°-120°	1377.1	18.0
90°-150°	4731.9	61.8
90°-180°	6369.0	83.1
0°-180°	7660.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	418	418	418	418	418	
5°	418	418	415	418	418	40
15°	398	400	399	404	404	112
25°	360	364	366	372	372	166
35°	310	317	323	330	332	194
45°	253	264	276	284	288	195
55°	193	208	224	237	240	173
65°	133	151	171	185	189	132
75°	72	94	117	132	137	77
85°	22	45	69	85	89	23
90°	7	45	88	110	117	9
95°	98	53	92	117	122	115
105°	458	485	368	111	118	485
115°	854	868	898	925	934	843
125°	1202	1214	1233	1246	1252	1074
135°	1495	1504	1515	1528	1526	1151
145°	1725	1735	1738	1745	1747	1080
155°	1900	1897	1898	1906	1897	875
165°	2003	1999	1997	2009	1999	566
175°	2050	2043	2044	2055	2043	195
180°	2050	2050	2050	2050	2050	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	418.1	418.1	418.1	418.1	418.1
2.5°	420.3	419.0	415.3	419.0	418.5
5°	418.5	417.6	414.9	418.5	418.1
7.5°	415.3	415.3	412.6	417.1	416.7
10°	410.8	411.7	409.4	414.0	413.0
12.5°	405.3	406.7	405.3	409.4	408.5
15°	398.5	399.8	399.4	403.9	403.5
17.5°	390.3	393.0	392.6	396.7	395.7
20°	381.2	383.9	384.8	388.9	389.4
22.5°	371.6	374.3	375.7	381.2	380.7
25°	359.8	364.3	365.7	371.6	371.6
27.5°	348.4	353.4	356.1	361.1	361.6
30°	336.1	342.0	345.6	351.1	351.1
32.5°	322.4	329.3	334.3	340.2	341.6
35°	309.7	317.0	322.9	329.7	331.5
37.5°	296.0	304.2	311.0	318.8	320.1
40°	282.3	290.5	299.7	307.4	309.2
42.5°	267.3	277.8	287.4	296.0	298.7
45°	253.2	264.1	275.5	284.2	287.8
47.5°	238.2	250.5	263.2	272.8	275.5
50°	223.6	236.4	250.5	260.9	264.1
52.5°	208.1	221.8	237.7	248.6	252.7
55°	193.1	208.1	224.5	236.8	240.5
57.5°	178.5	194.0	211.8	224.1	228.2
60°	163.0	179.4	198.1	210.9	215.9
62.5°	148.5	165.3	185.3	198.1	202.7
65°	133.4	151.2	171.2	184.9	189.4
67.5°	118.4	137.1	157.1	172.1	175.8
70°	102.5	122.0	143.9	158.5	163.0
72.5°	87.9	107.5	130.2	145.3	149.8
75°	72.4	93.8	116.6	131.6	137.1
77.5°	59.2	80.6	103.4	119.3	123.4
80°	45.1	67.4	91.1	106.6	111.1
82.5°	32.8	55.6	79.7	95.2	99.7
85°	22.3	45.1	69.2	84.7	89.3
87.5°	13.7	36.4	59.7	75.1	79.7
90°	7.4	45.0	88.1	109.6	117.2
92.5°	40.5	50.9	87.4	113.1	118.7
95°	97.9	53.3	92.3	117.1	121.7
97.5°	173.7	147.3	91.1	116.9	123.1
100°	261.5	306.6	89.9	115.3	121.4
102.5°	361.6	394.2	149.6	112.1	119.7
105°	457.6	485.3	367.8	110.9	118.0
107.5°	559.2	582.5	624.0	401.7	206.2
110°	660.8	681.2	716.1	677.8	463.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	758.3	775.3	809.4	834.5	835.6
115°	853.9	868.4	898.5	924.7	934.4
117.5°	948.3	962.6	985.7	1008.8	1014.0
120°	1034.6	1050.6	1070.2	1092.9	1096.1
122.5°	1123.0	1134.5	1154.7	1172.5	1177.2
125°	1201.8	1214.0	1233.3	1245.8	1252.1
127.5°	1281.0	1292.7	1311.7	1325.4	1325.5
130°	1354.1	1365.8	1381.0	1395.8	1395.5
132.5°	1423.7	1435.9	1447.3	1461.6	1460.2
135°	1495.3	1504.0	1515.1	1527.9	1525.5
137.5°	1556.2	1568.0	1574.2	1589.1	1588.3
140°	1616.8	1625.9	1631.8	1644.8	1643.9
142.5°	1673.1	1681.8	1686.3	1696.8	1694.5
145°	1724.9	1735.1	1738.1	1744.8	1746.7
147.5°	1774.7	1782.3	1785.4	1789.8	1784.0
150°	1820.4	1825.0	1828.0	1831.1	1827.4
152.5°	1861.5	1863.1	1864.6	1870.7	1863.1
155°	1899.6	1896.6	1898.1	1905.7	1896.6
157.5°	1930.1	1930.1	1928.6	1937.7	1925.5
160°	1957.5	1956.0	1954.5	1963.6	1952.9
162.5°	1983.4	1978.8	1977.3	1988.0	1978.8
165°	2003.2	1998.6	1997.1	2009.3	1998.6
167.5°	2020.0	2013.9	2013.9	2026.1	2013.9
170°	2033.7	2027.6	2027.6	2039.8	2027.6
172.5°	2042.8	2035.2	2036.7	2048.9	2035.2
175°	2050.4	2042.8	2044.3	2055.0	2042.8
177.5°	2053.5	2045.9	2047.4	2059.6	2044.3
180°	2050.4	2050.4	2050.4	2050.4	2050.4

(END OF REPORT)