

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: P1031634

Luminaire Tested: S123DIW-B340D1535UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031634
REPORT IS A COMBINATION OF REPORTS P991374 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1535UB50-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

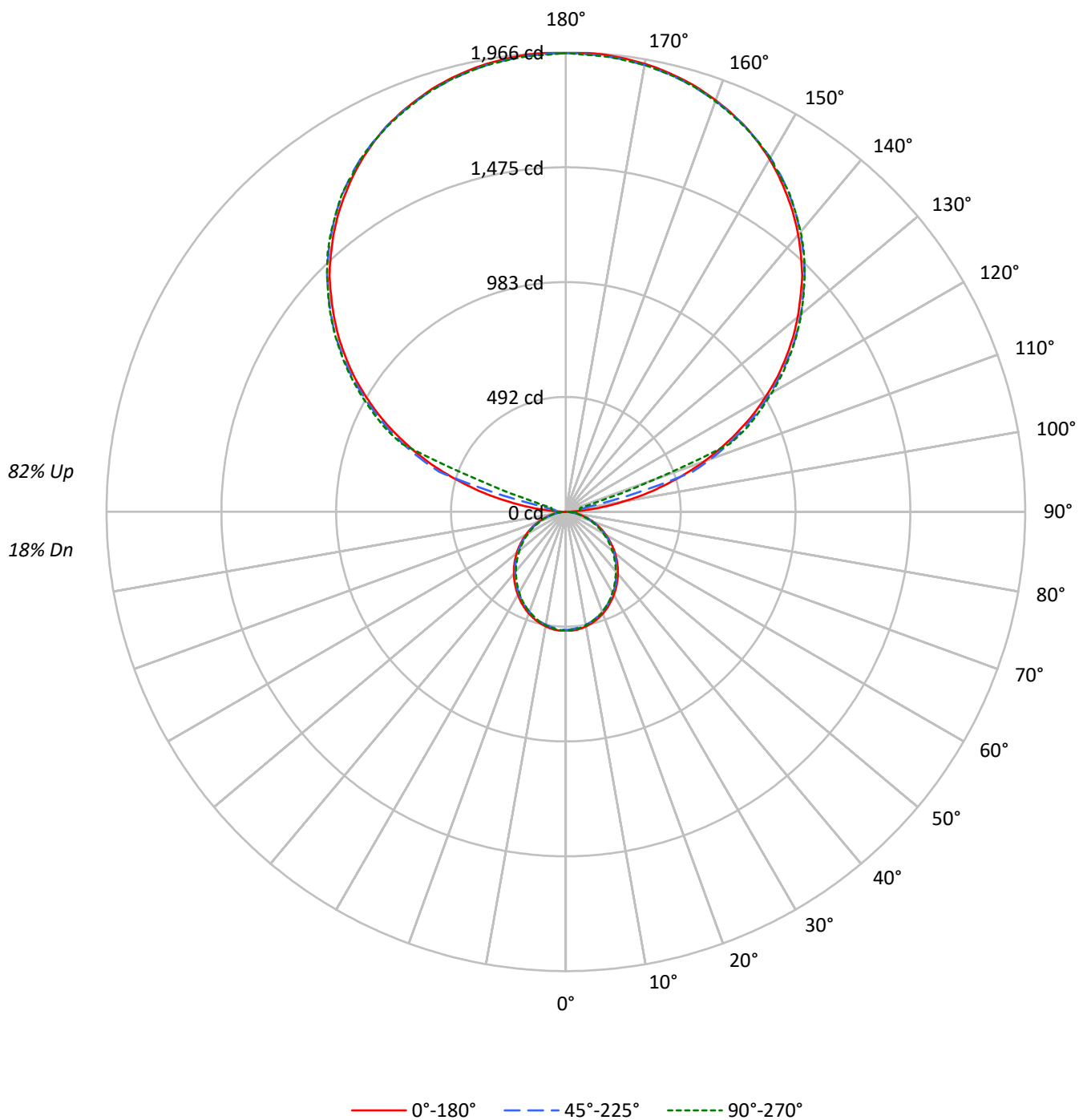
Lumens per Lamp: N/A
Luminaire Lumens: 7309.0 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	45	45	45	27	27	27
1	91	86	83	79	80	76	73	70	57	55	53	40	39	38	24	23	23
2	82	75	70	65	72	67	62	58	50	47	44	35	33	31	21	20	19
3	75	66	59	54	66	59	53	48	44	40	37	31	28	26	18	17	16
4	69	58	51	45	60	52	45	41	39	35	31	27	25	22	16	15	14
5	63	52	44	38	55	46	39	35	35	30	27	24	22	19	15	13	12
6	58	46	39	33	51	41	35	30	31	27	23	22	19	17	13	12	10
7	53	42	34	29	47	37	30	26	28	24	20	20	17	15	12	10	9
8	49	38	30	25	43	33	27	23	25	21	18	18	15	13	11	9	8
9	46	34	27	22	40	30	24	20	23	19	16	16	14	12	10	9	7
10	42	31	24	20	37	28	22	18	21	17	14	15	12	10	9	8	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5459	5459	5459
5°	5473	5271	5263
10°	5425	5092	5041
15°	5349	4907	4798
20°	5263	4701	4557
25°	5150	4483	4300
30°	5028	4259	4029
35°	4900	4029	3760
40°	4766	3787	3496
45°	4617	3552	3220
50°	4467	3291	2943
55°	4274	3017	2662
60°	4077	2717	2363
65°	3890	2391	2051
70°	3622	2029	1687
75°	3233	1607	1310
80°	2796	1130	925
85°	2180	607	463

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4617 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.8	0.7
10°-20°	135.0	1.8
20°-30°	199.4	2.7
30°-40°	232.9	3.2
40°-50°	234.1	3.2
50°-60°	205.7	2.8
60°-70°	153.2	2.1
70°-80°	87.2	1.2
80°-90°	28.7	0.4
90°-100°	69.2	0.9
100°-110°	334.7	4.6
110°-120°	820.2	11.2
120°-130°	1041.3	14.2
130°-140°	1112.4	15.2
140°-150°	1040.2	14.2
150°-160°	839.0	11.5
160°-170°	541.5	7.4
170°-180°	186.6	2.6
0°-30°	382.2	5.2
0°-40°	615.1	8.4
0°-60°	1054.9	14.4
0°-90°	1323.9	18.1
90°-120°	1224.2	16.7
90°-150°	4418.0	60.4
90°-180°	5985.0	81.9
0°-180°	7309.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	507	507	507	507	507	
5°	508	505	501	505	504	48
15°	483	482	476	479	477	136
25°	439	436	430	431	430	202
35°	379	377	371	368	366	237
45°	311	309	304	298	296	240
55°	236	236	230	225	223	211
65°	161	159	154	151	150	159
75°	85	83	82	80	78	91
85°	23	22	22	21	21	24
90°	2	16	35	41	44	7
95°	89	29	45	55	55	106
105°	435	451	319	61	64	461
115°	815	824	837	852	858	805
125°	1149	1161	1167	1170	1173	1027
135°	1431	1440	1445	1450	1445	1102
145°	1651	1661	1664	1667	1667	1034
155°	1819	1816	1817	1825	1816	838
165°	1918	1914	1912	1924	1914	542
175°	1963	1956	1957	1968	1956	187
180°	1963	1963	1963	1963	1963	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	507.2	507.2	507.2	507.2	507.2
2.5°	509.4	507.6	502.8	507.2	506.8
5°	507.6	505.4	500.7	505.0	504.1
7.5°	503.7	501.5	496.7	500.7	500.2
10°	498.5	496.3	490.6	494.5	493.7
12.5°	491.5	489.7	484.5	487.1	486.7
15°	483.2	481.5	475.8	479.3	476.7
17.5°	474.0	471.9	466.2	468.8	467.9
20°	463.6	461.0	455.3	457.0	455.7
22.5°	451.8	449.2	443.5	444.8	443.1
25°	438.7	436.1	430.4	430.9	429.6
27.5°	425.2	422.6	416.5	416.9	415.6
30°	410.4	408.2	402.1	402.1	399.0
32.5°	395.5	392.5	388.1	385.1	383.8
35°	379.4	376.8	371.1	368.5	366.3
37.5°	363.3	359.8	354.1	351.1	349.8
40°	346.3	343.7	337.5	334.1	332.3
42.5°	329.3	326.2	320.1	316.6	314.9
45°	310.9	309.2	303.5	298.3	296.1
47.5°	293.1	290.4	285.2	280.0	278.2
50°	274.7	272.6	266.9	262.1	259.5
52.5°	255.6	254.3	248.1	244.2	241.6
55°	235.9	235.5	229.8	225.0	222.9
57.5°	217.6	215.9	211.5	207.2	204.5
60°	197.6	197.1	191.9	188.0	185.8
62.5°	179.7	178.4	173.1	169.2	167.9
65°	160.9	158.7	154.4	150.9	149.6
67.5°	140.9	139.1	135.6	132.6	130.8
70°	123.0	120.4	117.7	114.7	112.5
72.5°	104.2	102.5	99.4	96.8	95.9
75°	85.0	83.3	82.0	79.8	78.5
77.5°	68.0	67.2	65.4	63.7	63.7
80°	51.5	50.2	49.3	48.8	48.8
82.5°	35.3	35.3	35.3	34.5	34.0
85°	22.7	21.8	21.8	20.9	20.9
87.5°	11.3	10.0	9.6	9.2	9.2
90°	1.5	16.0	35.0	40.8	43.8
92.5°	33.5	24.8	37.9	48.1	49.6
95°	89.0	29.2	45.2	55.4	55.4
97.5°	161.9	121.1	46.7	58.3	59.8
100°	246.5	275.7	48.1	59.8	61.3
102.5°	342.8	361.7	107.9	59.8	62.7
105°	434.7	450.7	319.4	61.3	64.2
107.5°	532.4	545.5	567.4	342.8	151.7
110°	630.1	641.8	657.8	609.7	401.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	723.4	733.7	749.7	762.8	759.9
115°	815.3	824.1	837.2	851.8	857.6
117.5°	905.8	916.0	923.3	934.9	936.4
120°	988.9	1002.0	1006.4	1018.1	1018.1
122.5°	1073.5	1083.7	1089.5	1096.8	1098.3
125°	1149.4	1161.0	1166.9	1169.8	1172.7
127.5°	1225.2	1236.9	1244.2	1248.5	1245.6
130°	1295.2	1306.9	1312.7	1318.5	1315.6
132.5°	1362.3	1374.0	1378.3	1384.2	1379.8
135°	1430.9	1439.6	1445.4	1449.8	1445.4
137.5°	1489.2	1500.9	1503.8	1511.1	1508.2
140°	1547.5	1556.3	1560.7	1566.5	1563.6
142.5°	1601.5	1610.3	1614.6	1619.0	1614.6
145°	1651.1	1661.3	1664.2	1667.1	1667.1
147.5°	1699.2	1706.5	1709.4	1712.4	1705.1
150°	1743.0	1747.4	1750.3	1753.2	1748.8
152.5°	1782.4	1783.8	1785.3	1791.1	1783.8
155°	1818.8	1815.9	1817.4	1824.7	1815.9
157.5°	1848.0	1848.0	1846.5	1855.3	1843.6
160°	1874.3	1872.8	1871.3	1880.1	1869.9
162.5°	1899.1	1894.7	1893.2	1903.4	1894.7
165°	1918.0	1913.6	1912.2	1923.9	1913.6
167.5°	1934.1	1928.2	1928.2	1939.9	1928.2
170°	1947.2	1941.4	1941.4	1953.0	1941.4
172.5°	1955.9	1948.6	1950.1	1961.8	1948.6
175°	1963.2	1955.9	1957.4	1967.6	1955.9
177.5°	1966.1	1958.9	1960.3	1972.0	1957.4
180°	1963.2	1963.2	1963.2	1963.2	1963.2

(END OF REPORT)