

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: P1031776

Luminaire Tested: S123DIW-B560D1535UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031776
REPORT IS A COMBINATION OF REPORTS P991701 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D1535UB50-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

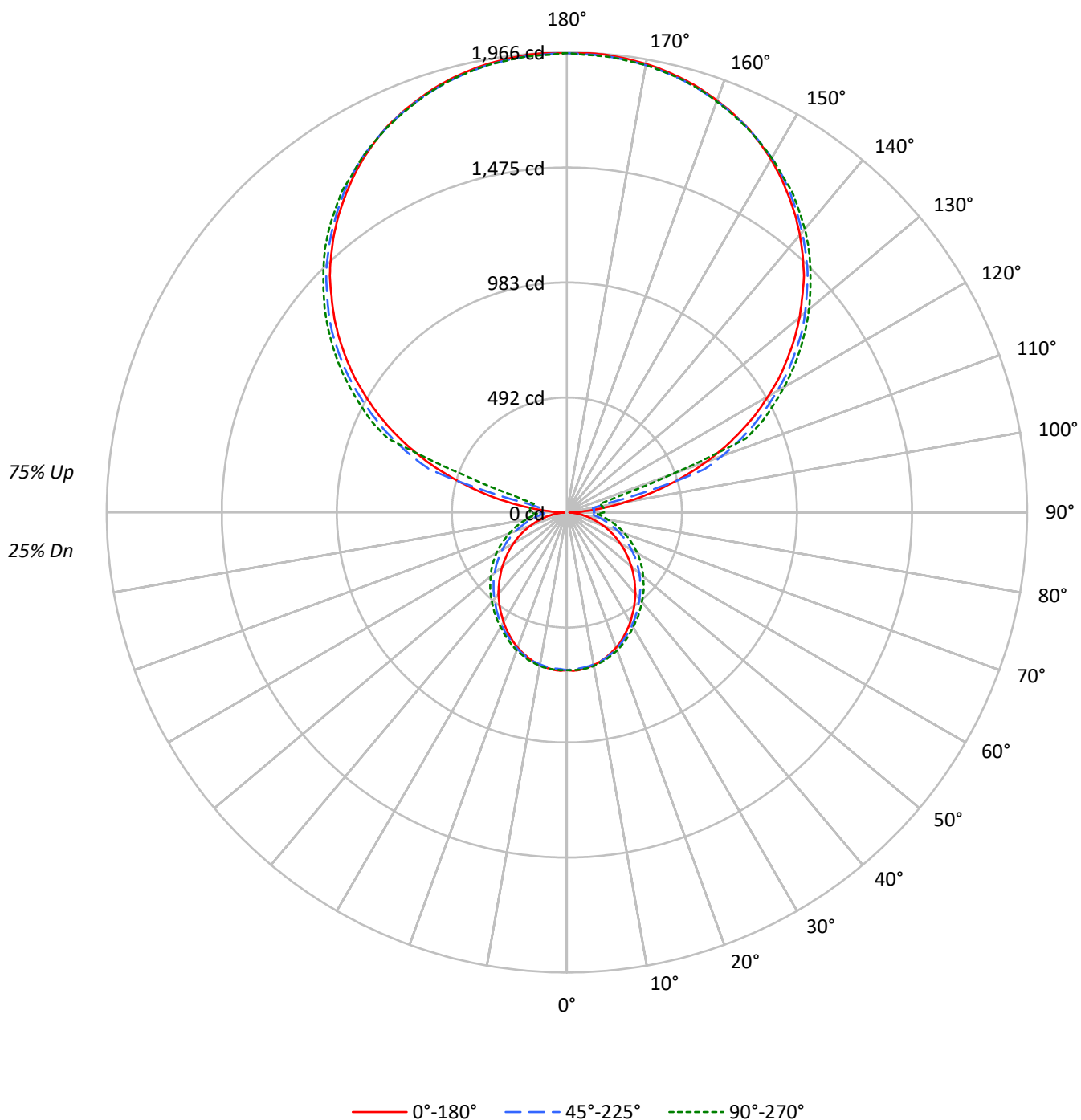
Lumens per Lamp: N/A
Luminaire Lumens: 8252.0 lumens
Efficiency: N/A
Efficacy: 108.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 76.2
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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	33	33	33
1	92	87	83	80	81	78	74	72	60	58	56	44	42	41	29	28	27
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22
3	76	66	59	54	67	59	53	48	46	42	38	33	31	28	22	20	19
4	69	59	51	45	61	52	46	41	41	36	32	30	26	24	19	18	16
5	63	52	44	38	56	46	40	35	36	31	27	26	23	21	17	15	14
6	58	46	38	33	51	42	35	30	32	27	24	24	20	18	16	14	12
7	54	42	34	29	47	37	31	26	29	24	21	21	18	16	14	12	11
8	50	38	30	25	44	34	27	23	26	22	18	20	16	14	13	11	9
9	46	34	27	22	41	31	24	20	24	19	16	18	15	12	12	10	8
10	43	31	24	20	38	28	22	18	22	18	14	16	13	11	11	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7248	7248	7248
5°	7268	7035	7030
10°	7200	6845	6793
15°	7104	6634	6541
20°	6969	6400	6270
25°	6803	6136	5991
30°	6632	5896	5710
35°	6442	5646	5482
40°	6259	5416	5239
45°	6056	5195	5041
50°	5856	4974	4824
55°	5635	4748	4626
60°	5419	4518	4422
65°	5195	4272	4183
70°	4859	3996	3937
75°	4435	3681	3684
80°	3941	3363	3395
85°	3448	3105	3187

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 6056 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.9	0.8
10°-20°	182.1	2.2
20°-30°	272.3	3.3
30°-40°	325.1	3.9
40°-50°	340.2	4.1
50°-60°	319.2	3.9
60°-70°	266.6	3.2
70°-80°	190.7	2.3
80°-90°	117.4	1.4
90°-100°	140.5	1.7
100°-110°	387.1	4.7
110°-120°	855.2	10.4
120°-130°	1061.2	12.9
130°-140°	1121.3	13.6
140°-150°	1042.0	12.6
150°-160°	839.0	10.2
160°-170°	541.5	6.6
170°-180°	186.6	2.3
0°-30°	518.3	6.3
0°-40°	843.4	10.2
0°-60°	1502.8	18.2
0°-90°	2077.5	25.2
90°-120°	1382.9	16.8
90°-150°	4607.5	55.8
90°-180°	6175.0	74.8
0°-180°	8252.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	673	673	673	673	673	
5°	674	673	668	674	673	64
15°	642	644	643	651	650	181
25°	580	587	589	598	598	267
35°	499	510	520	531	534	312
45°	408	425	444	458	464	314
55°	311	335	362	381	387	278
65°	215	244	276	298	305	212
75°	117	151	188	212	221	125
85°	36	73	112	136	144	37
90°	11	62	118	149	159	12
95°	97	66	118	151	158	113
105°	441	474	374	137	146	467
115°	819	837	876	908	920	809
125°	1152	1163	1190	1209	1217	1029
135°	1432	1440	1454	1472	1471	1103
145°	1652	1661	1664	1673	1676	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°	673.4	673.4	673.4	673.4	673.4
2.5°	677.0	674.8	669.0	674.8	674.1
5°	674.1	672.6	668.2	674.1	673.4
7.5°	669.0	669.0	664.6	671.9	671.2
10°	661.6	663.1	659.4	666.8	665.3
12.5°	652.8	655.0	652.8	659.4	658.0
15°	641.8	644.0	643.3	650.6	649.9
17.5°	628.6	633.0	632.3	638.9	637.4
20°	613.9	618.3	619.8	626.4	627.1
22.5°	598.5	602.9	605.1	613.9	613.2
25°	579.5	586.8	589.0	598.5	598.5
27.5°	561.1	569.2	573.6	581.7	582.4
30°	541.3	550.9	556.7	565.5	565.5
32.5°	519.3	530.3	538.4	547.9	550.1
35°	498.8	510.5	520.1	531.1	534.0
37.5°	476.8	490.0	501.0	513.5	515.7
40°	454.8	468.0	482.6	495.1	498.0
42.5°	430.6	447.4	462.8	476.8	481.2
45°	407.8	425.4	443.8	457.7	463.6
47.5°	383.6	403.4	424.0	439.4	443.8
50°	360.1	380.7	403.4	420.3	425.4
52.5°	335.2	357.2	382.9	400.5	407.1
55°	311.0	335.2	361.6	381.4	387.3
57.5°	287.5	312.5	341.1	360.9	367.5
60°	262.6	289.0	319.1	339.6	347.7
62.5°	239.1	266.3	298.5	319.1	326.4
65°	214.9	243.5	275.8	297.8	305.1
67.5°	190.7	220.8	253.1	277.3	283.1
70°	165.0	196.6	231.8	255.3	262.6
72.5°	141.6	173.1	209.8	234.0	241.3
75°	116.6	151.1	187.8	212.0	220.8
77.5°	95.4	129.8	166.5	192.2	198.8
80°	72.6	108.6	146.7	171.6	179.0
82.5°	52.8	89.5	128.4	153.3	160.6
85°	35.9	72.6	111.5	136.4	143.8
87.5°	22.0	58.7	96.1	121.0	128.4
90°	11.0	61.5	117.9	148.6	159.0
92.5°	42.3	65.1	114.9	149.3	157.4
95°	97.1	65.9	117.8	150.8	158.1
97.5°	169.2	154.8	114.9	148.5	157.4
100°	253.1	305.8	111.9	144.9	153.7
102.5°	348.7	388.1	167.3	139.8	150.0
105°	440.6	474.2	374.4	136.9	146.4
107.5°	537.5	566.0	618.0	413.2	228.7
110°	634.5	659.4	704.7	675.7	473.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	727.8	748.4	792.2	823.7	827.4
115°	819.0	836.6	876.1	908.3	919.9
117.5°	909.5	925.5	957.8	987.0	994.3
120°	991.8	1008.6	1037.2	1065.8	1070.9
122.5°	1076.4	1088.1	1116.6	1140.1	1146.7
125°	1151.6	1163.2	1190.4	1208.7	1216.7
127.5°	1227.4	1238.4	1264.0	1283.0	1285.2
130°	1297.4	1308.4	1328.8	1348.6	1350.1
132.5°	1363.8	1375.5	1390.8	1409.9	1410.6
135°	1432.4	1440.3	1454.2	1471.8	1471.1
137.5°	1490.7	1501.6	1509.7	1528.7	1529.5
140°	1548.2	1557.0	1563.6	1580.4	1581.2
142.5°	1602.2	1610.3	1614.6	1628.5	1627.8
145°	1651.8	1661.3	1664.2	1673.0	1675.9
147.5°	1699.2	1706.5	1709.4	1714.6	1710.2
150°	1743.0	1747.4	1750.3	1753.2	1750.3
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)