

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: P1031778

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031778
REPORT IS A COMBINATION OF REPORTS P991704 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-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

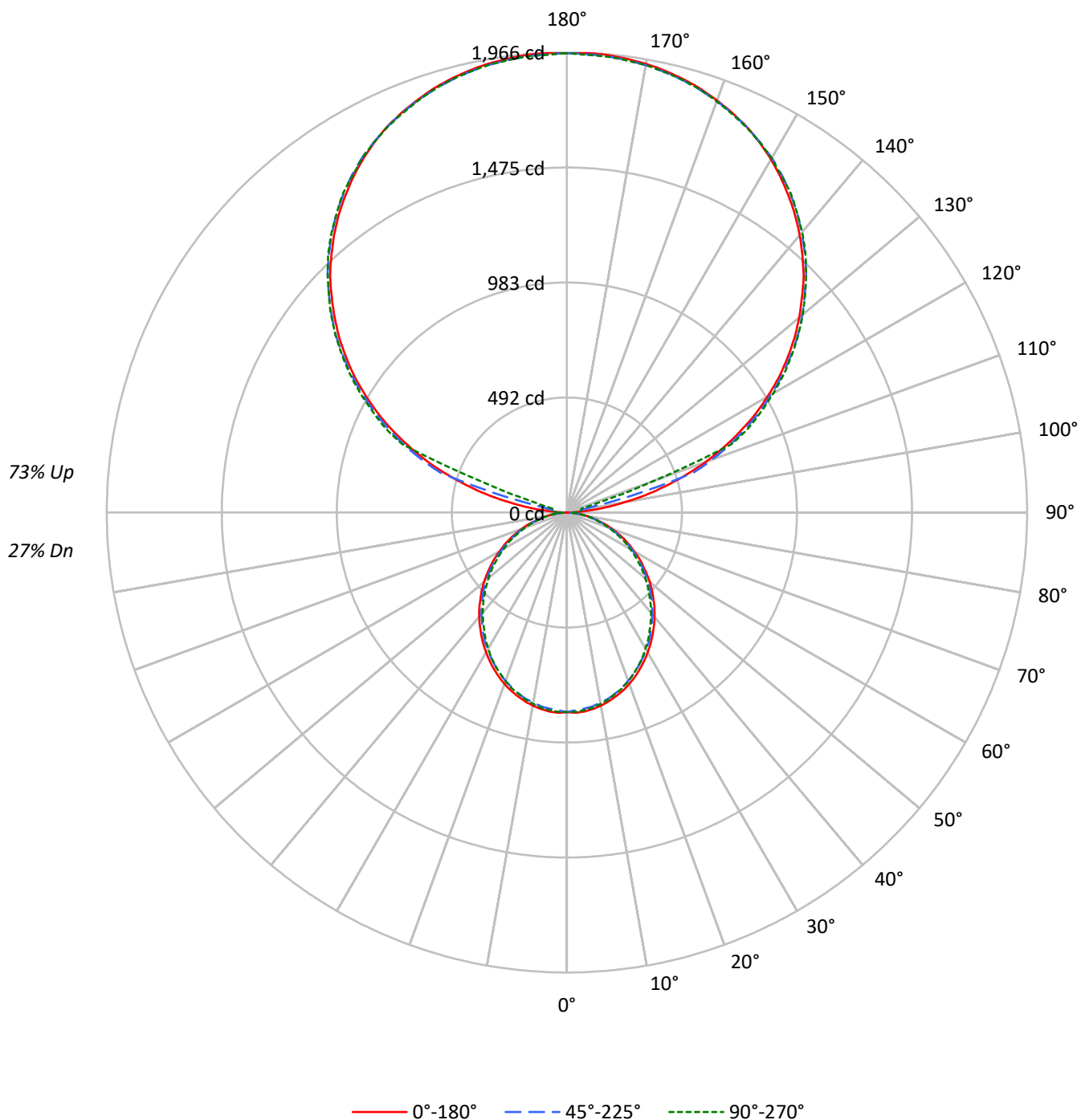
Lumens per Lamp: N/A
Luminaire Lumens: 8209.0 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35	27		
1	93	88	85	81	83	79	76	73	62	60	58	46	44	43	31	30	29	23		
2	84	77	71	66	75	69	64	60	54	51	48	40	38	36	27	26	25	19		
3	77	68	61	55	68	61	55	50	48	43	40	35	33	30	24	22	21	16		
4	70	60	52	46	62	54	47	42	42	38	34	31	28	26	21	20	18	14		
5	64	53	45	40	57	48	41	36	38	33	29	28	25	22	19	17	16	12		
6	59	47	40	34	53	43	36	31	34	29	25	25	22	19	17	15	14	11		
7	55	43	35	30	49	38	32	27	30	26	22	23	20	17	16	14	12	9		
8	50	39	31	26	45	35	28	24	28	23	19	21	18	15	15	12	11	8		
9	47	35	28	23	42	32	25	21	25	21	17	19	16	14	13	11	10	8		
10	44	32	25	20	39	29	23	19	23	19	15	18	14	12	12	10	9	7		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9182	9182	9182
5°	9204	8865	8852
10°	9122	8564	8477
15°	8996	8253	8069
20°	8851	7906	7664
25°	8663	7541	7232
30°	8457	7162	6776
35°	8241	6776	6324
40°	8015	6370	5880
45°	7767	5975	5415
50°	7514	5535	4949
55°	7190	5075	4476
60°	6857	4569	3974
65°	6541	4021	3449
70°	6090	3413	2837
75°	5440	2703	2202
80°	4696	1900	1557
85°	3660	1022	780

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7767 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.4	1.0
10°-20°	227.1	2.8
20°-30°	335.4	4.1
30°-40°	391.7	4.8
40°-50°	393.8	4.8
50°-60°	345.9	4.2
60°-70°	257.6	3.1
70°-80°	146.6	1.8
80°-90°	45.6	0.6
90°-100°	69.2	0.8
100°-110°	334.7	4.1
110°-120°	820.2	10.0
120°-130°	1041.3	12.7
130°-140°	1112.4	13.6
140°-150°	1040.2	12.7
150°-160°	839.0	10.2
160°-170°	541.5	6.6
170°-180°	186.6	2.3
0°-30°	642.8	7.8
0°-40°	1034.5	12.6
0°-60°	1774.1	21.6
0°-90°	2223.9	27.1
90°-120°	1224.2	14.9
90°-150°	4418.0	53.8
90°-180°	5985.0	72.9
0°-180°	8209.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	853	853	853	853	853	
5°	854	850	842	849	848	81
15°	813	810	800	806	802	229
25°	738	734	724	725	722	340
35°	638	634	624	620	616	399
45°	523	520	510	502	498	404
55°	397	396	386	378	375	355
65°	271	267	260	254	252	267
75°	143	140	138	134	132	153
85°	38	37	37	35	35	41
90°	2	16	35	41	44	8
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°	853.0	853.0	853.0	853.0	853.0
2.5°	856.7	853.7	845.7	853.0	852.3
5°	853.7	850.1	842.0	849.3	847.9
7.5°	847.1	843.5	835.4	842.0	841.3
10°	838.3	834.7	825.1	831.7	830.3
12.5°	826.6	823.7	814.9	819.3	818.5
15°	812.7	809.7	800.2	806.1	801.7
17.5°	797.3	793.6	784.1	788.5	787.0
20°	779.7	775.3	765.7	768.7	766.5
22.5°	759.9	755.5	745.9	748.1	745.2
25°	737.9	733.5	723.9	724.7	722.5
27.5°	715.1	710.7	700.4	701.2	699.0
30°	690.2	686.5	676.2	676.2	671.1
32.5°	665.2	660.1	652.8	647.6	645.4
35°	638.1	633.7	624.2	619.8	616.1
37.5°	611.0	605.1	595.6	590.4	588.2
40°	582.4	578.0	567.7	561.8	558.9
42.5°	553.8	548.6	538.4	532.5	529.6
45°	523.0	520.0	510.5	501.7	498.0
47.5°	492.9	488.5	479.7	470.9	467.9
50°	462.1	458.4	448.9	440.8	436.4
52.5°	429.8	427.6	417.3	410.7	406.3
55°	396.8	396.1	386.5	378.5	374.8
57.5°	366.0	363.1	355.7	348.4	344.0
60°	332.3	331.5	322.7	316.1	312.5
62.5°	302.2	300.0	291.2	284.6	282.4
65°	270.6	267.0	259.6	253.8	251.6
67.5°	236.9	234.0	228.1	223.0	220.0
70°	206.8	202.4	198.0	192.9	189.2
72.5°	175.3	172.4	167.2	162.8	161.4
75°	143.0	140.1	137.9	134.2	132.0
77.5°	114.4	113.0	110.0	107.1	107.1
80°	86.5	84.3	82.9	82.1	82.1
82.5°	59.4	59.4	59.4	57.9	57.2
85°	38.1	36.7	36.7	35.2	35.2
87.5°	19.1	16.9	16.1	15.4	15.4
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)