

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: P1031758

Luminaire Tested: S123DIW-B560D1535UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031758
REPORT IS A COMBINATION OF REPORTS P991648 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D1535UB27-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

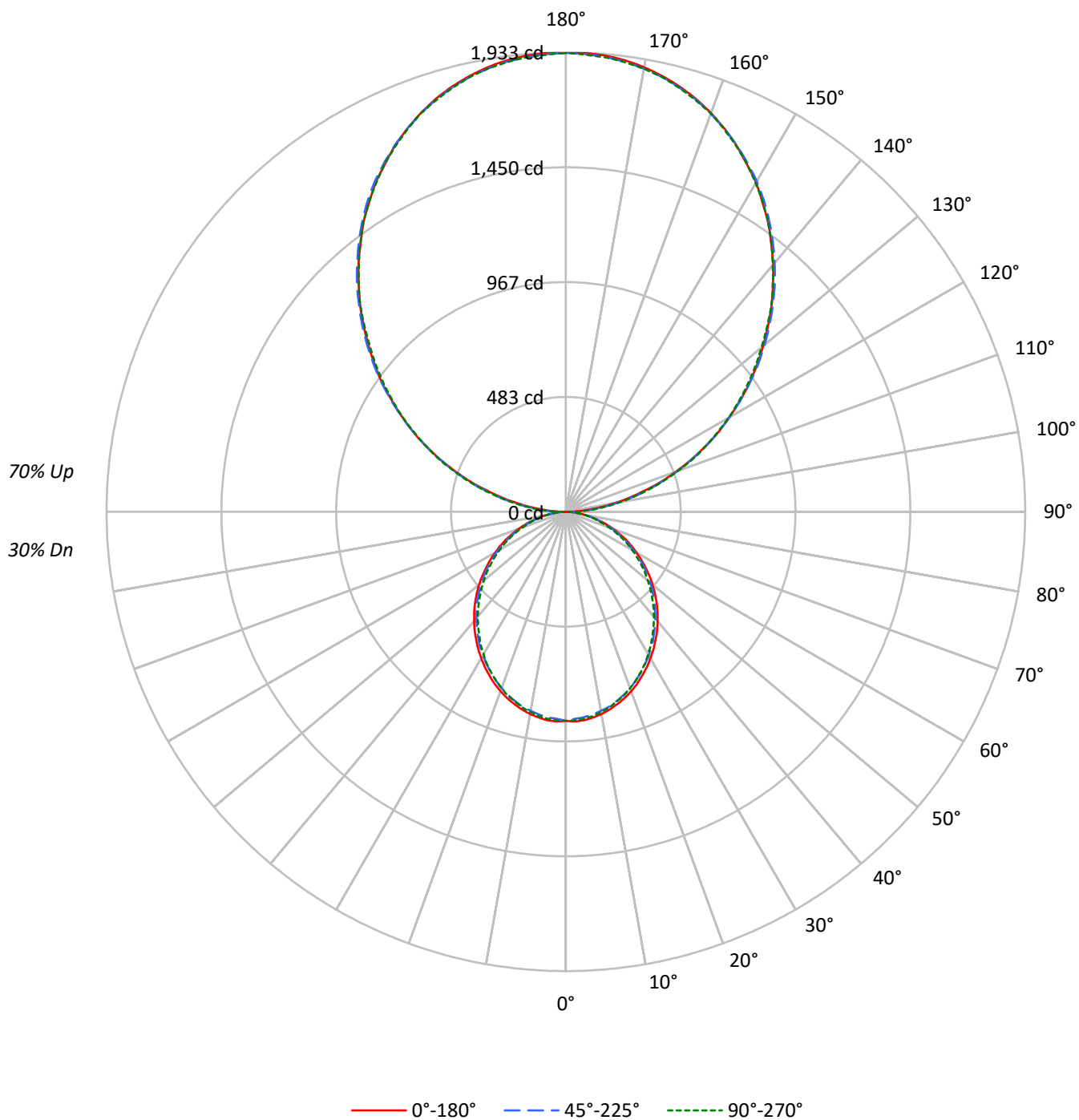
Lumens per Lamp: N/A
Luminaire Lumens: 7644.0 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	102	102	102	102	92	92	92	92	72	72	72	54	54	54	38	38	38
1	93	89	85	82	84	80	77	74	63	61	59	48	46	45	33	32	32
2	85	78	72	67	76	70	65	61	55	52	49	42	39	37	29	28	27
3	77	68	61	55	69	61	55	51	49	44	41	37	34	32	26	24	23
4	71	60	53	47	63	54	48	43	43	38	35	33	30	27	23	21	19
5	65	54	46	40	58	48	42	36	38	34	30	29	26	23	21	19	17
6	60	48	40	34	53	43	36	32	35	30	26	26	23	20	19	17	15
7	55	43	35	30	49	39	32	28	31	26	23	24	20	18	17	15	13
8	51	39	31	26	46	35	29	24	28	24	20	22	18	16	16	13	12
9	47	35	28	23	42	32	26	21	26	21	18	20	17	14	14	12	11
10	44	32	25	21	40	29	23	19	24	19	16	18	15	13	13	11	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9467	9467	9467
5°	9491	9141	9126
10°	9406	8831	8741
15°	9275	8509	8320
20°	9125	8152	7902
25°	8932	7775	7456
30°	8719	7385	6987
35°	8496	6987	6521
40°	8264	6568	6063
45°	8008	6161	5583
50°	7747	5706	5103
55°	7413	5233	4615
60°	7069	4712	4097
65°	6747	4146	3556
70°	6281	3520	2925
75°	5611	2788	2271
80°	4843	1960	1606
85°	3775	1053	805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8008 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	1.1
10°-20°	234.1	3.1
20°-30°	345.8	4.5
30°-40°	403.8	5.3
40°-50°	406.0	5.3
50°-60°	356.6	4.7
60°-70°	265.6	3.5
70°-80°	151.1	2.0
80°-90°	47.1	0.6
90°-100°	124.3	1.6
100°-110°	376.3	4.9
110°-120°	640.6	8.4
120°-130°	842.7	11.0
130°-140°	947.2	12.4
140°-150°	931.2	12.2
150°-160°	784.0	10.3
160°-170°	521.9	6.8
170°-180°	182.8	2.4
0°-30°	662.8	8.7
0°-40°	1066.7	14.0
0°-60°	1829.3	23.9
0°-90°	2293.1	30.0
90°-120°	1141.1	14.9
90°-150°	3862.2	50.5
90°-180°	5351.0	70.0
0°-180°	7644.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	880	880	880	880	880	
5°	880	876	868	876	874	83
15°	838	835	825	831	827	236
25°	761	756	746	747	745	350
35°	658	653	644	639	635	412
45°	539	536	526	517	514	416
55°	409	408	398	390	386	367
65°	279	275	268	262	259	275
75°	148	144	142	138	136	158
85°	39	38	38	36	36	42
90°	2	17	36	42	46	9
95°	90	100	112	118	118	99
105°	341	344	358	358	361	365
115°	645	649	646	648	646	638
125°	944	948	945	939	933	842
135°	1224	1233	1232	1226	1223	943
145°	1485	1488	1493	1491	1485	928
155°	1701	1701	1702	1708	1698	783
165°	1852	1848	1848	1857	1846	522
175°	1927	1920	1920	1930	1919	183
180°	1931	1931	1931	1931	1931	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	879.5	879.5	879.5	879.5	879.5
2.5°	883.3	880.3	872.0	879.5	878.8
5°	880.3	876.5	868.2	875.7	874.2
7.5°	873.5	869.7	861.4	868.2	867.4
10°	864.4	860.6	850.8	857.6	856.1
12.5°	852.3	849.3	840.2	844.7	844.0
15°	837.9	834.9	825.1	831.1	826.6
17.5°	822.0	818.3	808.4	813.0	811.5
20°	803.9	799.4	789.5	792.6	790.3
22.5°	783.5	778.9	769.1	771.4	768.4
25°	760.8	756.3	746.4	747.2	744.9
27.5°	737.3	732.8	722.2	723.0	720.7
30°	711.6	707.9	697.3	697.3	692.0
32.5°	685.9	680.6	673.1	667.8	665.5
35°	657.9	653.4	643.6	639.0	635.3
37.5°	630.0	623.9	614.1	608.8	606.5
40°	600.5	595.9	585.3	579.3	576.3
42.5°	571.0	565.7	555.1	549.0	546.0
45°	539.2	536.2	526.4	517.3	513.5
47.5°	508.2	503.7	494.6	485.5	482.5
50°	476.4	472.7	462.8	454.5	450.0
52.5°	443.2	440.9	430.3	423.5	419.0
55°	409.1	408.4	398.5	390.2	386.4
57.5°	377.4	374.3	366.8	359.2	354.7
60°	342.6	341.8	332.8	325.9	322.2
62.5°	311.6	309.3	300.2	293.4	291.2
65°	279.1	275.3	267.7	261.7	259.4
67.5°	244.3	241.2	235.2	229.9	226.9
70°	213.3	208.7	204.2	198.9	195.1
72.5°	180.7	177.7	172.4	167.9	166.4
75°	147.5	144.4	142.2	138.4	136.1
77.5°	118.0	116.5	113.4	110.4	110.4
80°	89.2	87.0	85.5	84.7	84.7
82.5°	61.3	61.3	61.3	59.7	59.0
85°	39.3	37.8	37.8	36.3	36.3
87.5°	19.7	17.4	16.6	15.9	15.9
90°	1.5	16.7	36.4	42.5	45.5
92.5°	45.5	54.6	63.7	68.3	65.2
95°	89.5	100.1	112.3	118.3	118.3
97.5°	147.2	154.7	163.8	171.4	169.9
100°	206.3	215.4	223.0	227.6	230.6
102.5°	274.6	279.1	289.8	294.3	292.8
105°	341.3	344.4	358.0	358.0	361.1
107.5°	420.2	421.7	427.8	432.4	430.8
110°	493.0	496.1	499.1	505.2	502.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	568.9	570.4	570.4	578.0	578.0
115°	644.7	649.3	646.3	647.8	646.3
117.5°	722.1	723.6	720.6	720.6	716.0
120°	793.4	802.5	794.9	793.4	790.4
122.5°	867.7	873.8	870.8	866.2	861.7
125°	943.6	948.1	945.1	939.0	933.0
127.5°	1013.4	1022.5	1019.4	1010.3	1004.3
130°	1083.2	1095.3	1090.7	1084.7	1074.1
132.5°	1152.9	1165.1	1162.0	1154.5	1146.9
135°	1224.2	1233.3	1231.8	1225.8	1222.7
137.5°	1289.5	1297.1	1301.6	1294.0	1289.5
140°	1357.7	1365.3	1366.8	1365.3	1354.7
142.5°	1419.9	1427.5	1430.6	1429.0	1421.4
145°	1485.2	1488.2	1492.7	1491.2	1485.2
147.5°	1541.3	1547.4	1551.9	1551.9	1542.8
150°	1600.5	1603.5	1606.5	1606.5	1597.4
152.5°	1649.0	1653.6	1655.1	1658.1	1650.5
155°	1700.6	1700.6	1702.1	1708.2	1697.5
157.5°	1744.6	1743.1	1744.6	1750.6	1741.5
160°	1785.5	1782.5	1782.5	1790.1	1784.0
162.5°	1821.9	1817.4	1818.9	1826.5	1815.9
165°	1852.3	1847.7	1847.7	1856.8	1846.2
167.5°	1878.1	1872.0	1873.5	1882.6	1873.5
170°	1899.3	1893.2	1893.2	1903.9	1893.2
172.5°	1916.0	1909.9	1909.9	1919.0	1908.4
175°	1926.6	1920.5	1920.5	1929.7	1919.0
177.5°	1932.7	1926.6	1926.6	1935.7	1925.1
180°	1931.2	1931.2	1931.2	1931.2	1931.2

(END OF REPORT)