

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: P1031756

Luminaire Tested: S123DIW-B560D1535UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031756
REPORT IS A COMBINATION OF REPORTS P991645 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-D1
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

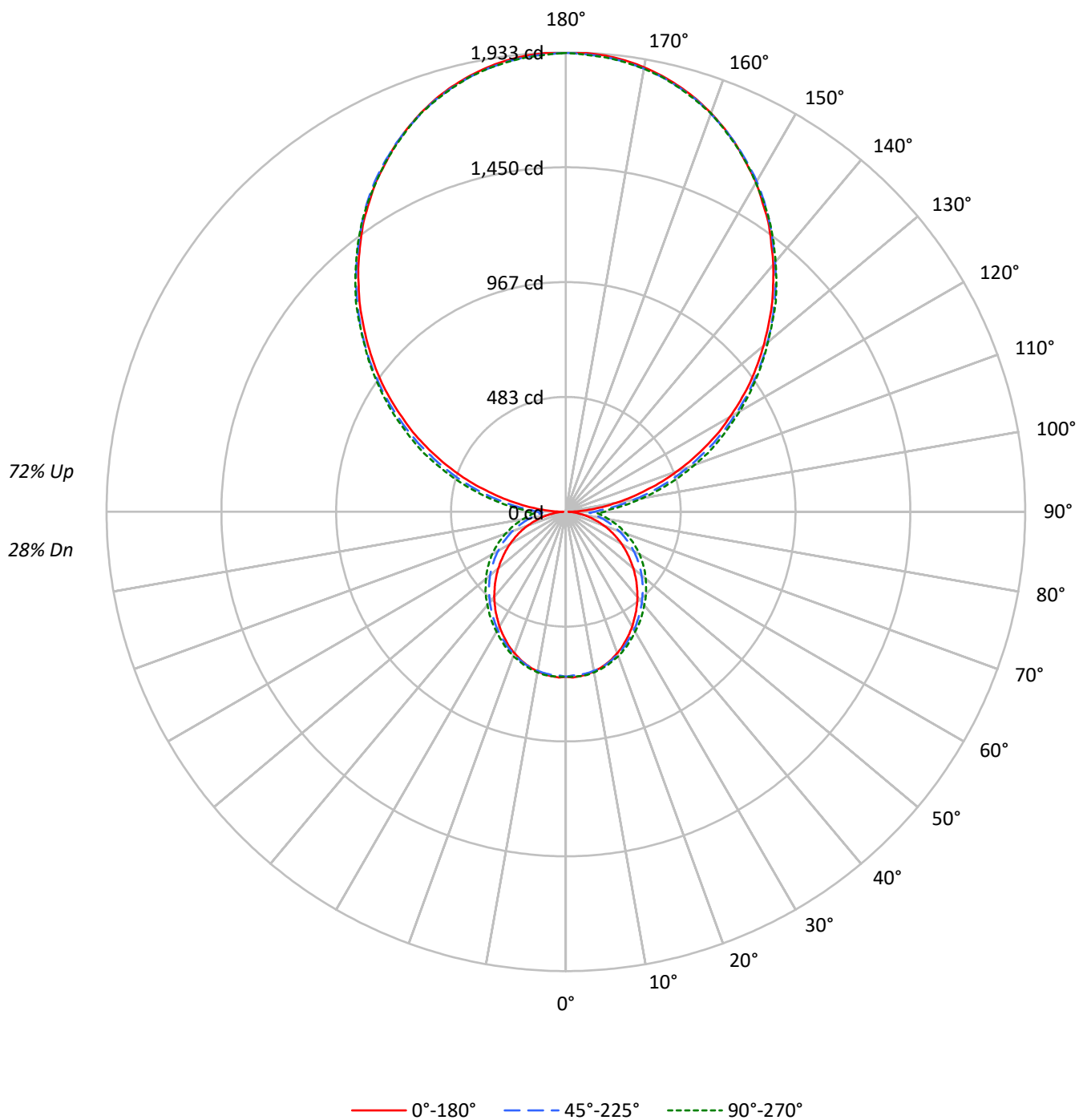
Lumens per Lamp: N/A
Luminaire Lumens: 7688.0 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36
1	92	88	84	80	82	79	75	72	61	59	57	45	44	42	31	30	29
2	84	76	70	65	74	68	63	59	53	50	47	39	37	35	27	25	24
3	76	67	60	54	68	60	54	49	47	42	39	35	32	29	23	22	20
4	70	59	51	45	62	53	46	41	41	37	33	31	27	25	21	19	17
5	64	52	44	38	57	47	40	35	37	32	28	27	24	21	19	16	15
6	58	47	39	33	52	42	35	30	33	28	24	25	21	19	17	15	13
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	15	13	11
8	50	38	30	25	44	34	28	23	27	22	19	20	17	14	14	12	10
9	46	34	27	22	41	31	25	20	25	20	17	19	15	13	13	11	9
10	43	31	24	20	39	28	22	18	23	18	15	17	14	11	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7472	7472	7472
5°	7492	7253	7247
10°	7423	7056	7003
15°	7325	6840	6743
20°	7184	6598	6464
25°	7013	6325	6177
30°	6838	6078	5887
35°	6641	5820	5651
40°	6452	5584	5402
45°	6243	5355	5196
50°	6038	5128	4974
55°	5809	4895	4769
60°	5586	4657	4558
65°	5357	4403	4313
70°	5009	4120	4059
75°	4572	3795	3797
80°	4066	3466	3499
85°	3564	3200	3285

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6243 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.9	0.9
10°-20°	187.7	2.4
20°-30°	280.7	3.7
30°-40°	335.2	4.4
40°-50°	350.7	4.6
50°-60°	329.1	4.3
60°-70°	274.9	3.6
70°-80°	196.5	2.6
80°-90°	121.0	1.6
90°-100°	197.8	2.6
100°-110°	430.3	5.6
110°-120°	676.6	8.8
120°-130°	863.3	11.2
130°-140°	956.4	12.4
140°-150°	933.1	12.1
150°-160°	784.0	10.2
160°-170°	521.9	6.8
170°-180°	182.8	2.4
0°-30°	534.3	6.9
0°-40°	869.5	11.3
0°-60°	1549.3	20.2
0°-90°	2141.7	27.9
90°-120°	1304.7	17.0
90°-150°	4057.6	52.8
90°-180°	5546.0	72.1
0°-180°	7688.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	694	694	694	694	694	
5°	695	693	689	695	694	66
15°	662	664	663	671	670	186
25°	597	605	607	617	617	275
35°	514	526	536	548	550	322
45°	420	439	458	472	478	324
55°	321	346	373	393	399	287
65°	222	251	284	307	315	219
75°	120	156	194	218	228	128
85°	37	75	115	141	148	38
90°	11	64	122	154	164	14
95°	98	138	187	217	224	105
105°	347	369	415	436	446	371
115°	648	662	686	706	711	642
125°	946	950	969	979	978	844
135°	1226	1234	1241	1248	1249	944
145°	1486	1488	1493	1497	1494	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°	694.2	694.2	694.2	694.2	694.2
2.5°	698.0	695.7	689.6	695.7	694.9
5°	694.9	693.4	688.9	694.9	694.2
7.5°	689.6	689.6	685.1	692.7	691.9
10°	682.1	683.6	679.8	687.4	685.9
12.5°	673.0	675.3	673.0	679.8	678.3
15°	661.7	663.9	663.2	670.7	670.0
17.5°	648.1	652.6	651.8	658.6	657.1
20°	632.9	637.5	639.0	645.8	646.5
22.5°	617.1	621.6	623.9	632.9	632.2
25°	597.4	605.0	607.2	617.1	617.1
27.5°	578.5	586.8	591.3	599.7	600.4
30°	558.1	567.9	573.9	583.0	583.0
32.5°	535.4	546.7	555.0	564.9	567.1
35°	514.2	526.3	536.1	547.5	550.5
37.5°	491.5	505.1	516.5	529.3	531.6
40°	468.8	482.4	497.6	510.4	513.5
42.5°	443.9	461.3	477.2	491.5	496.1
45°	420.4	438.6	457.5	471.9	477.9
47.5°	395.5	415.9	437.1	453.0	457.5
50°	371.3	392.5	415.9	433.3	438.6
52.5°	345.6	368.3	394.7	412.9	419.7
55°	320.6	345.6	372.8	393.2	399.3
57.5°	296.4	322.1	351.6	372.0	378.9
60°	270.7	297.9	328.9	350.1	358.4
62.5°	246.5	274.5	307.8	328.9	336.5
65°	221.6	251.1	284.3	307.0	314.6
67.5°	196.6	227.6	260.9	285.8	291.9
70°	170.1	202.7	239.0	263.2	270.7
72.5°	145.9	178.5	216.3	241.2	248.8
75°	120.2	155.8	193.6	218.5	227.6
77.5°	98.3	133.8	171.7	198.1	204.9
80°	74.9	111.9	151.2	176.9	184.5
82.5°	54.4	92.3	132.3	158.0	165.6
85°	37.1	74.9	114.9	140.7	148.2
87.5°	22.7	60.5	99.1	124.8	132.3
90°	11.3	63.6	121.8	153.7	164.2
92.5°	54.6	96.2	143.1	172.7	176.4
95°	97.8	137.9	187.2	216.6	224.2
97.5°	154.8	189.5	234.1	264.4	270.5
100°	213.1	246.4	288.8	315.3	325.9
102.5°	280.6	306.3	351.1	376.7	382.8
105°	347.3	368.6	414.7	435.9	445.8
107.5°	425.5	442.9	480.0	505.0	510.2
110°	497.5	514.2	547.5	573.3	576.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	573.4	585.5	614.3	640.8	647.6
115°	648.5	662.2	686.4	706.0	710.6
117.5°	725.9	733.4	756.1	774.3	775.7
120°	796.4	809.3	826.7	842.6	844.8
122.5°	870.7	878.3	898.8	910.8	911.6
125°	945.9	950.4	969.3	979.1	978.4
127.5°	1015.7	1024.0	1039.8	1045.8	1045.1
130°	1085.5	1096.8	1107.3	1115.7	1109.6
132.5°	1154.4	1166.6	1174.9	1181.0	1178.7
135°	1225.7	1234.1	1240.9	1248.5	1249.2
137.5°	1291.0	1297.9	1307.6	1312.1	1311.4
140°	1358.5	1366.1	1369.8	1379.7	1372.8
142.5°	1420.7	1427.5	1430.6	1438.8	1435.0
145°	1486.0	1488.2	1492.7	1497.2	1494.3
147.5°	1541.3	1547.4	1551.9	1554.2	1548.1
150°	1600.5	1603.5	1606.5	1606.5	1598.9
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)