

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: P1031739

Luminaire Tested: S123DIW-B560D1320UB35-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031739
REPORT IS A COMBINATION OF REPORTS P991620 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D1320UB35-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

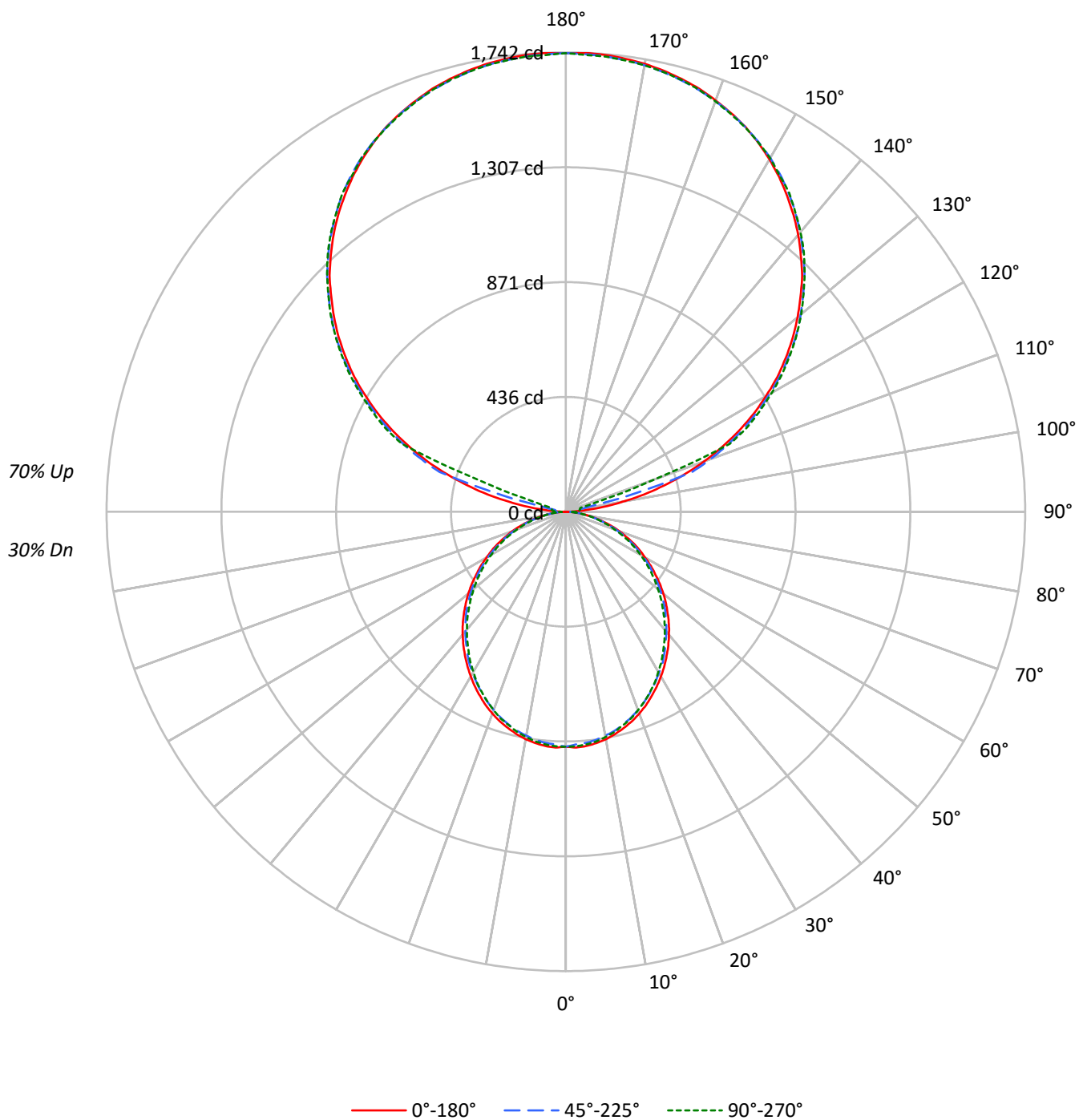
Lumens per Lamp: N/A
Luminaire Lumens: 7624.0 lumens
Efficiency: N/A
Efficacy: 115.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 66.1
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	55	55	55	38	38	38
1	93	89	85	82	84	80	77	74	63	61	59	48	47	45	34	33	32
2	85	78	72	67	76	70	65	61	55	52	49	42	40	38	30	28	27
3	77	68	61	56	69	62	56	51	49	45	41	37	34	32	26	24	23
4	71	60	53	47	63	54	48	43	43	39	35	33	30	27	23	21	20
5	65	54	46	40	58	48	42	37	39	34	30	30	26	23	21	19	17
6	60	48	40	34	53	43	37	32	35	30	26	27	23	20	19	17	15
7	55	43	35	30	49	39	32	28	31	26	23	24	21	18	17	15	13
8	51	39	32	26	46	35	29	24	29	24	20	22	19	16	16	14	12
9	47	36	28	23	42	32	26	22	26	21	18	20	17	14	15	12	11
10	44	32	25	21	40	30	23	19	24	19	16	19	15	13	14	11	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9591	9591	9591
5°	9615	9261	9246
10°	9529	8946	8855
15°	9397	8621	8428
20°	9245	8259	8005
25°	9049	7877	7554
30°	8834	7482	7078
35°	8609	7078	6607
40°	8372	6654	6142
45°	8113	6241	5656
50°	7849	5781	5170
55°	7510	5302	4676
60°	7162	4773	4151
65°	6834	4200	3603
70°	6364	3567	2964
75°	5683	2823	2301
80°	4908	1985	1627
85°	3823	1067	816

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 8113 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.0	1.1
10°-20°	237.2	3.1
20°-30°	350.3	4.6
30°-40°	409.1	5.4
40°-50°	411.3	5.4
50°-60°	361.3	4.7
60°-70°	269.1	3.5
70°-80°	153.1	2.0
80°-90°	47.0	0.6
90°-100°	61.3	0.8
100°-110°	296.5	3.9
110°-120°	726.6	9.5
120°-130°	922.4	12.1
130°-140°	985.3	12.9
140°-150°	921.4	12.1
150°-160°	743.2	9.7
160°-170°	479.6	6.3
170°-180°	165.3	2.2
0°-30°	671.5	8.8
0°-40°	1080.6	14.2
0°-60°	1853.3	24.3
0°-90°	2322.5	30.5
90°-120°	1084.4	14.2
90°-150°	3913.5	51.3
90°-180°	5302.0	69.5
0°-180°	7624.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	891	891	891	891	891	
5°	892	888	880	887	886	85
15°	849	846	836	842	837	239
25°	771	766	756	757	755	355
35°	667	662	652	647	644	417
45°	546	543	533	524	520	422
55°	414	414	404	395	392	371
65°	283	279	271	265	263	279
75°	149	146	144	140	138	160
85°	40	38	38	37	37	43
90°	1	14	31	36	39	7
95°	79	26	40	49	49	94
105°	385	399	283	54	57	408
115°	722	730	742	754	760	713
125°	1018	1028	1034	1036	1039	910
135°	1267	1275	1280	1284	1280	976
145°	1462	1472	1474	1477	1477	916
155°	1611	1608	1610	1616	1608	742
165°	1699	1695	1694	1704	1695	480
175°	1739	1733	1734	1743	1733	166
180°	1739	1739	1739	1739	1739	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	891.0	891.0	891.0	891.0	891.0
2.5°	894.9	891.8	883.4	891.0	890.3
5°	891.8	888.0	879.6	887.2	885.7
7.5°	884.9	881.1	872.7	879.6	878.8
10°	875.7	871.9	861.9	868.8	867.3
12.5°	863.5	860.4	851.2	855.8	855.0
15°	848.9	845.8	835.9	842.0	837.4
17.5°	832.8	829.0	819.0	823.6	822.1
20°	814.4	809.8	799.9	802.9	800.6
22.5°	793.7	789.1	779.2	781.5	778.4
25°	770.8	766.2	756.2	757.0	754.7
27.5°	747.0	742.4	731.7	732.5	730.2
30°	721.0	717.1	706.4	706.4	701.0
32.5°	694.9	689.5	681.9	676.5	674.2
35°	666.6	662.0	652.0	647.4	643.6
37.5°	638.2	632.1	622.1	616.8	614.5
40°	608.3	603.7	593.0	586.9	583.8
42.5°	578.5	573.1	562.4	556.2	553.2
45°	546.3	543.2	533.2	524.1	520.2
47.5°	514.9	510.3	501.1	491.9	488.8
50°	482.7	478.9	468.9	460.5	455.9
52.5°	449.0	446.7	435.9	429.1	424.5
55°	414.5	413.7	403.8	395.3	391.5
57.5°	382.3	379.3	371.6	363.9	359.3
60°	347.1	346.3	337.1	330.2	326.4
62.5°	315.7	313.4	304.2	297.3	295.0
65°	282.7	278.9	271.2	265.1	262.8
67.5°	247.5	244.4	238.3	232.9	229.8
70°	216.1	211.5	206.9	201.5	197.7
72.5°	183.1	180.0	174.7	170.1	168.6
75°	149.4	146.3	144.0	140.2	137.9
77.5°	119.5	118.0	114.9	111.9	111.9
80°	90.4	88.1	86.6	85.8	85.8
82.5°	62.1	62.1	62.1	60.5	59.8
85°	39.8	38.3	38.3	36.8	36.8
87.5°	19.9	17.6	16.9	16.1	16.1
90°	1.3	14.2	31.0	36.2	38.8
92.5°	29.7	22.0	33.6	42.6	43.9
95°	78.8	25.8	40.1	49.1	49.1
97.5°	143.4	107.2	41.3	51.7	53.0
100°	218.3	244.2	42.6	53.0	54.3
102.5°	303.6	320.4	95.6	53.0	55.6
105°	385.0	399.2	282.9	54.3	56.8
107.5°	471.6	483.2	502.6	303.6	134.4
110°	558.1	568.5	582.7	540.0	355.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	640.8	649.9	664.1	675.7	673.1
115°	722.2	730.0	741.6	754.5	759.7
117.5°	802.3	811.4	817.8	828.2	829.5
120°	876.0	887.6	891.5	901.8	901.8
122.5°	950.9	959.9	965.1	971.6	972.9
125°	1018.1	1028.4	1033.6	1036.2	1038.8
127.5°	1085.3	1095.6	1102.1	1105.9	1103.4
130°	1147.3	1157.6	1162.8	1168.0	1165.4
132.5°	1206.7	1217.1	1220.9	1226.1	1222.2
135°	1267.4	1275.2	1280.4	1284.2	1280.4
137.5°	1319.1	1329.5	1332.0	1338.5	1335.9
140°	1370.8	1378.5	1382.4	1387.6	1385.0
142.5°	1418.6	1426.4	1430.2	1434.1	1430.2
145°	1462.5	1471.6	1474.2	1476.7	1476.7
147.5°	1505.2	1511.6	1514.2	1516.8	1510.3
150°	1543.9	1547.8	1550.4	1553.0	1549.1
152.5°	1578.8	1580.1	1581.4	1586.6	1580.1
155°	1611.1	1608.5	1609.8	1616.3	1608.5
157.5°	1636.9	1636.9	1635.7	1643.4	1633.1
160°	1660.2	1658.9	1657.6	1665.4	1656.3
162.5°	1682.2	1678.3	1677.0	1686.0	1678.3
165°	1699.0	1695.1	1693.8	1704.1	1695.1
167.5°	1713.2	1708.0	1708.0	1718.3	1708.0
170°	1724.8	1719.6	1719.6	1730.0	1719.6
172.5°	1732.6	1726.1	1727.4	1737.7	1726.1
175°	1739.0	1732.6	1733.8	1742.9	1732.6
177.5°	1741.6	1735.1	1736.4	1746.8	1733.8
180°	1739.0	1739.0	1739.0	1739.0	1739.0

(END OF REPORT)