

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: P1031740

Luminaire Tested: S123DIW-B560D1320UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031740
REPORT IS A COMBINATION OF REPORTS P991621 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D1320UB35-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

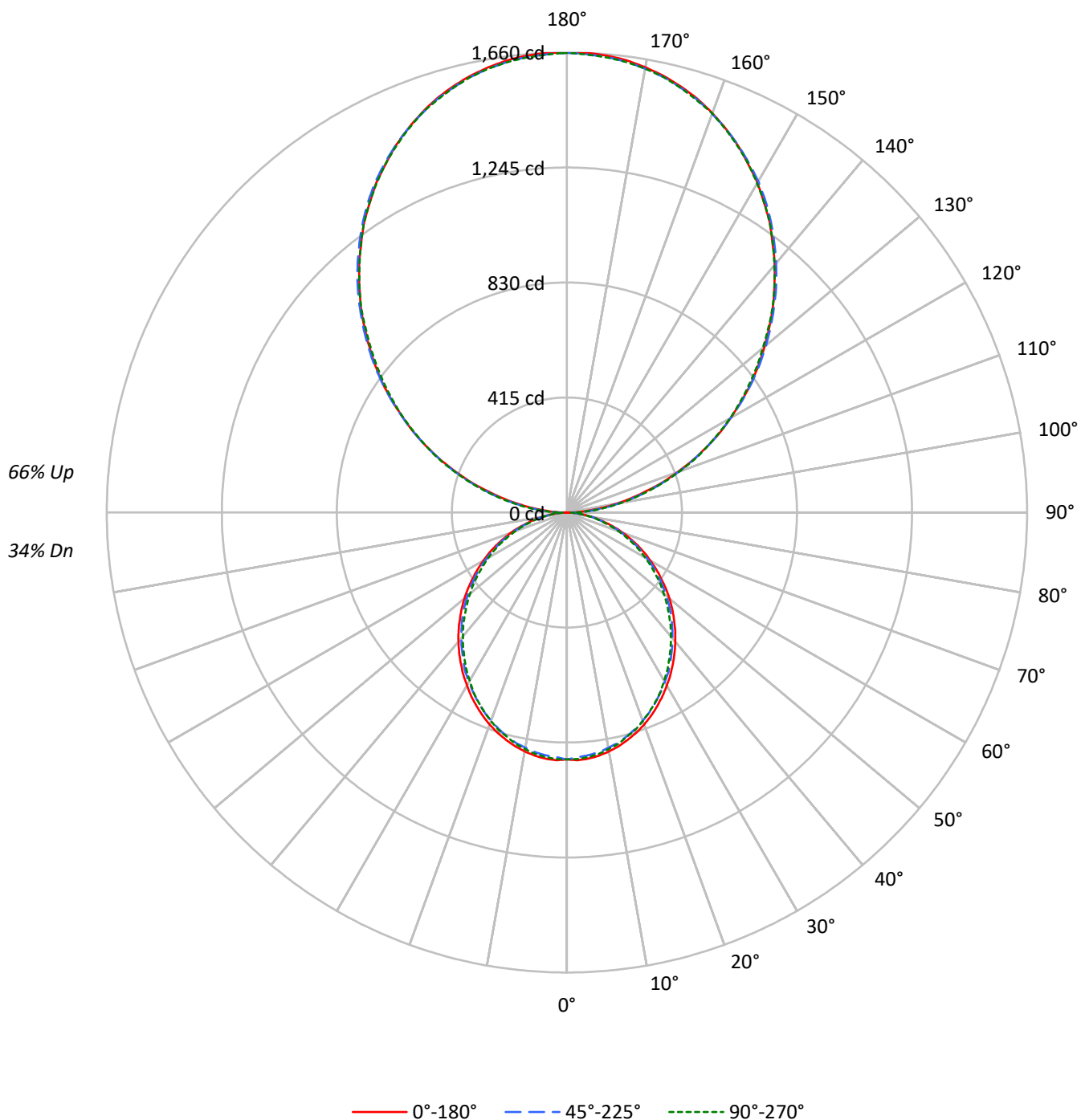
Lumens per Lamp: N/A
Luminaire Lumens: 6919.0 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41
1	94	90	86	83	85	81	78	75	65	63	61	50	49	47	36	35	35
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	32	30	29
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	26	25
4	71	61	53	47	64	55	48	43	44	40	36	34	31	28	25	23	21
5	65	54	46	40	59	49	42	37	40	35	31	31	27	25	23	20	18
6	60	48	40	35	54	44	37	32	36	30	27	28	24	21	20	18	16
7	55	44	36	30	50	40	33	28	32	27	23	25	22	19	19	16	14
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13
9	48	36	29	24	43	33	26	22	27	22	18	21	18	15	16	13	12
10	45	33	26	21	40	30	24	20	25	20	17	19	16	13	15	12	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	1.2
10°-20°	237.2	3.4
20°-30°	350.3	5.1
30°-40°	409.1	5.9
40°-50°	411.3	5.9
50°-60°	361.3	5.2
60°-70°	269.1	3.9
70°-80°	153.1	2.2
80°-90°	47.0	0.7
90°-100°	106.8	1.5
100°-110°	323.2	4.7
110°-120°	550.2	8.0
120°-130°	723.9	10.5
130°-140°	813.7	11.8
140°-150°	799.9	11.6
150°-160°	673.4	9.7
160°-170°	448.3	6.5
170°-180°	157.0	2.3
0°-30°	671.5	9.7
0°-40°	1080.6	15.6
0°-60°	1853.3	26.8
0°-90°	2322.5	33.6
90°-120°	980.2	14.2
90°-150°	3317.7	48.0
90°-180°	4596.0	66.4
0°-180°	6919.0	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	8
95°	77	86	96	102	102	85
105°	293	296	308	308	310	314
115°	554	558	555	556	555	548
125°	811	814	812	807	801	723
135°	1052	1060	1058	1053	1050	810
145°	1276	1278	1282	1281	1276	797
155°	1461	1461	1462	1467	1458	672
165°	1591	1587	1587	1595	1586	449
175°	1655	1650	1650	1658	1648	157
180°	1659	1659	1659	1659	1659	

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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	14.3	31.3	36.5	39.1
92.5°	39.1	46.9	54.7	58.6	56.0
95°	76.9	86.0	96.4	101.6	101.6
97.5°	126.4	132.9	140.7	147.3	146.0
100°	177.2	185.0	191.6	195.5	198.1
102.5°	235.9	239.8	248.9	252.8	251.5
105°	293.2	295.8	307.5	307.5	310.1
107.5°	361.0	362.3	367.5	371.4	370.1
110°	423.5	426.1	428.7	433.9	431.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	488.7	490.0	490.0	496.5	496.5
115°	553.8	557.7	555.1	556.4	555.1
117.5°	620.3	621.6	619.0	619.0	615.1
120°	681.5	689.4	682.8	681.5	678.9
122.5°	745.4	750.6	748.0	744.1	740.2
125°	810.6	814.5	811.9	806.6	801.4
127.5°	870.5	878.3	875.7	867.9	862.7
130°	930.4	940.9	937.0	931.7	922.6
132.5°	990.4	1000.8	998.2	991.7	985.2
135°	1051.6	1059.5	1058.1	1052.9	1050.3
137.5°	1107.7	1114.2	1118.1	1111.6	1107.7
140°	1166.3	1172.8	1174.1	1172.8	1163.7
142.5°	1219.7	1226.3	1228.9	1227.6	1221.0
145°	1275.8	1278.4	1282.3	1281.0	1275.8
147.5°	1324.0	1329.2	1333.1	1333.1	1325.3
150°	1374.8	1377.4	1380.0	1380.0	1372.2
152.5°	1416.5	1420.4	1421.7	1424.3	1417.8
155°	1460.8	1460.8	1462.1	1467.3	1458.2
157.5°	1498.6	1497.3	1498.6	1503.8	1496.0
160°	1533.8	1531.2	1531.2	1537.7	1532.5
162.5°	1565.1	1561.2	1562.5	1569.0	1559.9
165°	1591.1	1587.2	1587.2	1595.0	1585.9
167.5°	1613.3	1608.1	1609.4	1617.2	1609.4
170°	1631.5	1626.3	1626.3	1635.4	1626.3
172.5°	1645.9	1640.6	1640.6	1648.5	1639.3
175°	1655.0	1649.8	1649.8	1657.6	1648.5
177.5°	1660.2	1655.0	1655.0	1662.8	1653.7
180°	1658.9	1658.9	1658.9	1658.9	1658.9

(END OF REPORT)