

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: P1031733

Luminaire Tested: S123DIW-B560D1320UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031733
REPORT IS A COMBINATION OF REPORTS P991611 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D1320UB30-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

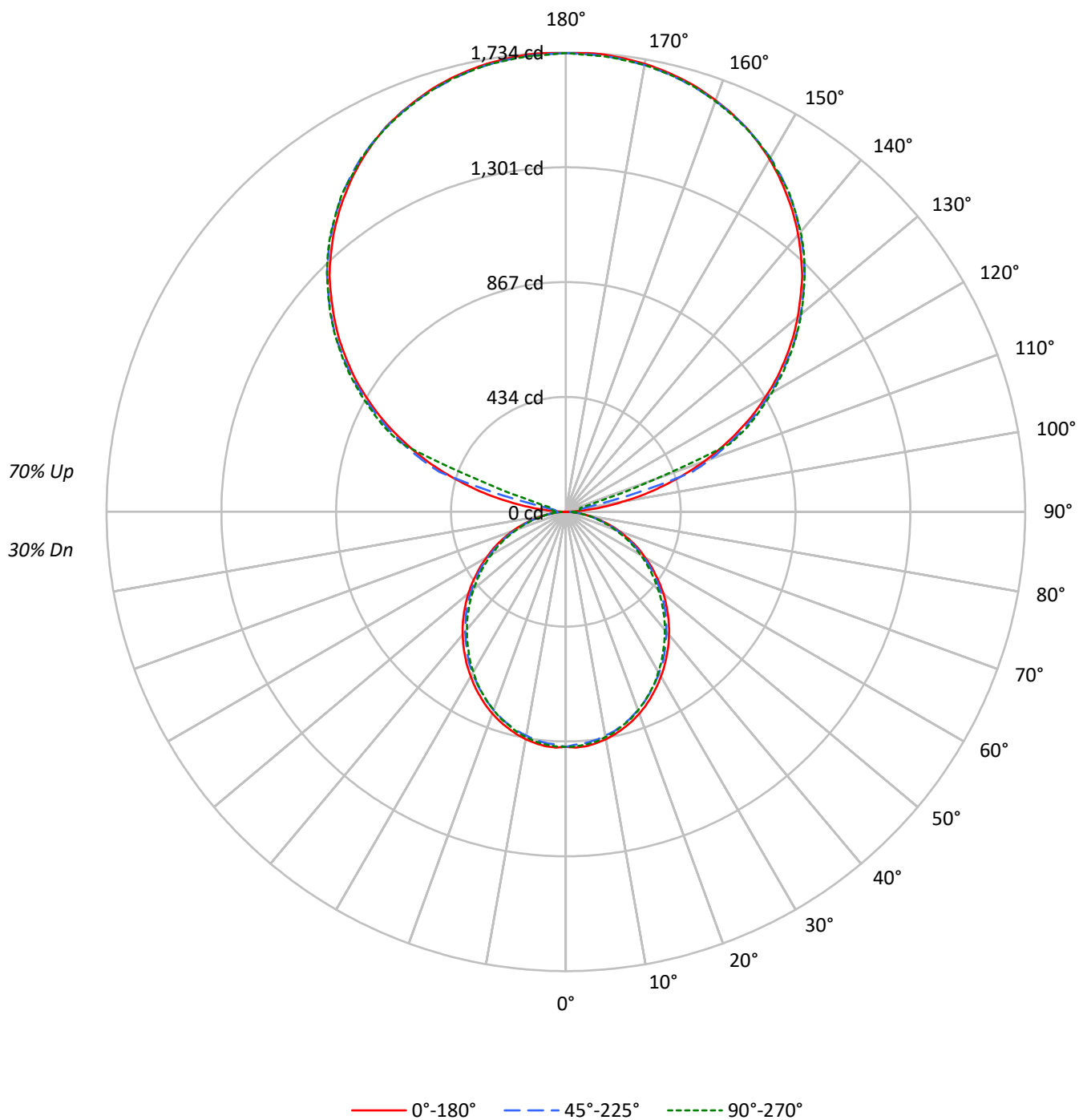
Lumens per Lamp: N/A
Luminaire Lumens: 7591.0 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	9550	9550	9550
5°	9574	9221	9207
10°	9488	8908	8817
15°	9356	8584	8392
20°	9205	8223	7971
25°	9009	7843	7521
30°	8795	7450	7048
35°	8571	7048	6578
40°	8336	6626	6115
45°	8078	6214	5632
50°	7815	5757	5147
55°	7478	5279	4656
60°	7131	4753	4133
65°	6805	4183	3588
70°	6334	3551	2951
75°	5660	2811	2291
80°	4886	1976	1620
85°	3813	1061	811

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8078 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.6	1.1
10°-20°	236.2	3.1
20°-30°	348.8	4.6
30°-40°	407.4	5.4
40°-50°	409.5	5.4
50°-60°	359.8	4.7
60°-70°	267.9	3.5
70°-80°	152.5	2.0
80°-90°	46.8	0.6
90°-100°	61.1	0.8
100°-110°	295.2	3.9
110°-120°	723.4	9.5
120°-130°	918.4	12.1
130°-140°	981.1	12.9
140°-150°	917.4	12.1
150°-160°	740.0	9.7
160°-170°	477.5	6.3
170°-180°	164.6	2.2
0°-30°	668.6	8.8
0°-40°	1076.0	14.2
0°-60°	1845.2	24.3
0°-90°	2312.4	30.5
90°-120°	1079.7	14.2
90°-150°	3896.5	51.3
90°-180°	5279.0	69.5
0°-180°	7591.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	887	887	887	887	887	
5°	888	884	876	883	882	84
15°	845	842	832	838	834	238
25°	767	763	753	754	751	354
35°	664	659	649	645	641	415
45°	544	541	531	522	518	420
55°	413	412	402	394	390	370
65°	282	278	270	264	262	278
75°	149	146	143	140	137	159
85°	40	38	38	37	37	43
90°	1	14	31	36	39	7
95°	78	26	40	49	49	94
105°	383	398	282	54	57	406
115°	719	727	738	751	756	710
125°	1014	1024	1029	1032	1034	906
135°	1262	1270	1275	1279	1275	972
145°	1456	1465	1468	1470	1470	912
155°	1604	1602	1603	1609	1602	739
165°	1692	1688	1686	1697	1688	478
175°	1732	1725	1726	1735	1725	165
180°	1732	1732	1732	1732	1732	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	887.2	887.2	887.2	887.2	887.2
2.5°	891.0	888.0	879.6	887.2	886.4
5°	888.0	884.2	875.8	883.4	881.9
7.5°	881.1	877.3	868.9	875.8	875.0
10°	871.9	868.1	858.2	865.1	863.6
12.5°	859.7	856.7	847.5	852.1	851.4
15°	845.2	842.2	832.3	838.4	833.8
17.5°	829.2	825.4	815.5	820.1	818.5
20°	810.9	806.3	796.4	799.5	797.2
22.5°	790.3	785.7	775.8	778.1	775.1
25°	767.4	762.9	752.9	753.7	751.4
27.5°	743.8	739.2	728.5	729.3	727.0
30°	717.8	714.0	703.4	703.4	698.0
32.5°	691.9	686.6	678.9	673.6	671.3
35°	663.7	659.1	649.2	644.6	640.8
37.5°	635.5	629.4	619.4	614.1	611.8
40°	605.7	601.1	590.5	584.3	581.3
42.5°	576.0	570.6	559.9	553.8	550.8
45°	543.9	540.9	530.9	521.8	518.0
47.5°	512.6	508.1	498.9	489.8	486.7
50°	480.6	476.8	466.9	458.5	453.9
52.5°	447.0	444.7	434.1	427.2	422.6
55°	412.7	411.9	402.0	393.6	389.8
57.5°	380.7	377.6	370.0	362.4	357.8
60°	345.6	344.8	335.7	328.8	325.0
62.5°	314.3	312.0	302.9	296.0	293.7
65°	281.5	277.7	270.1	263.9	261.7
67.5°	246.4	243.4	237.2	231.9	228.9
70°	215.1	210.5	206.0	200.6	196.8
72.5°	182.3	179.3	173.9	169.4	167.8
75°	148.8	145.7	143.4	139.6	137.3
77.5°	119.0	117.5	114.4	111.4	111.4
80°	90.0	87.7	86.2	85.4	85.4
82.5°	61.8	61.8	61.8	60.3	59.5
85°	39.7	38.1	38.1	36.6	36.6
87.5°	19.8	17.5	16.8	16.0	16.0
90°	1.3	14.2	30.9	36.0	38.6
92.5°	29.6	21.9	33.4	42.5	43.7
95°	78.5	25.7	39.9	48.9	48.9
97.5°	142.8	106.8	41.2	51.5	52.7
100°	217.4	243.1	42.5	52.7	54.0
102.5°	302.3	319.0	95.2	52.7	55.3
105°	383.3	397.5	281.7	54.0	56.6
107.5°	469.5	481.1	500.4	302.3	133.8
110°	555.7	566.0	580.2	537.7	353.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	638.0	647.1	661.2	672.8	670.2
115°	719.1	726.8	738.4	751.2	756.4
117.5°	798.8	807.8	814.3	824.6	825.9
120°	872.2	883.7	887.6	897.9	897.9
122.5°	946.8	955.8	960.9	967.4	968.6
125°	1013.7	1024.0	1029.1	1031.7	1034.3
127.5°	1080.6	1090.9	1097.3	1101.1	1098.6
130°	1142.3	1152.6	1157.7	1162.9	1160.3
132.5°	1201.5	1211.8	1215.6	1220.8	1216.9
135°	1261.9	1269.7	1274.8	1278.7	1274.8
137.5°	1313.4	1323.7	1326.3	1332.7	1330.1
140°	1364.9	1372.6	1376.4	1381.6	1379.0
142.5°	1412.4	1420.2	1424.0	1427.9	1424.0
145°	1456.2	1465.2	1467.8	1470.3	1470.3
147.5°	1498.6	1505.1	1507.6	1510.2	1503.8
150°	1537.2	1541.1	1543.7	1546.2	1542.4
152.5°	1572.0	1573.2	1574.5	1579.7	1573.2
155°	1604.1	1601.5	1602.8	1609.3	1601.5
157.5°	1629.8	1629.8	1628.6	1636.3	1626.0
160°	1653.0	1651.7	1650.4	1658.1	1649.1
162.5°	1674.9	1671.0	1669.7	1678.7	1671.0
165°	1691.6	1687.7	1686.4	1696.7	1687.7
167.5°	1705.7	1700.6	1700.6	1710.9	1700.6
170°	1717.3	1712.2	1712.2	1722.5	1712.2
172.5°	1725.0	1718.6	1719.9	1730.2	1718.6
175°	1731.5	1725.0	1726.3	1735.3	1725.0
177.5°	1734.0	1727.6	1728.9	1739.2	1726.3
180°	1731.5	1731.5	1731.5	1731.5	1731.5

(END OF REPORT)