

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: P1031734

Luminaire Tested: S123DIW-B560D1320UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031734
REPORT IS A COMBINATION OF REPORTS P991612 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-F1
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

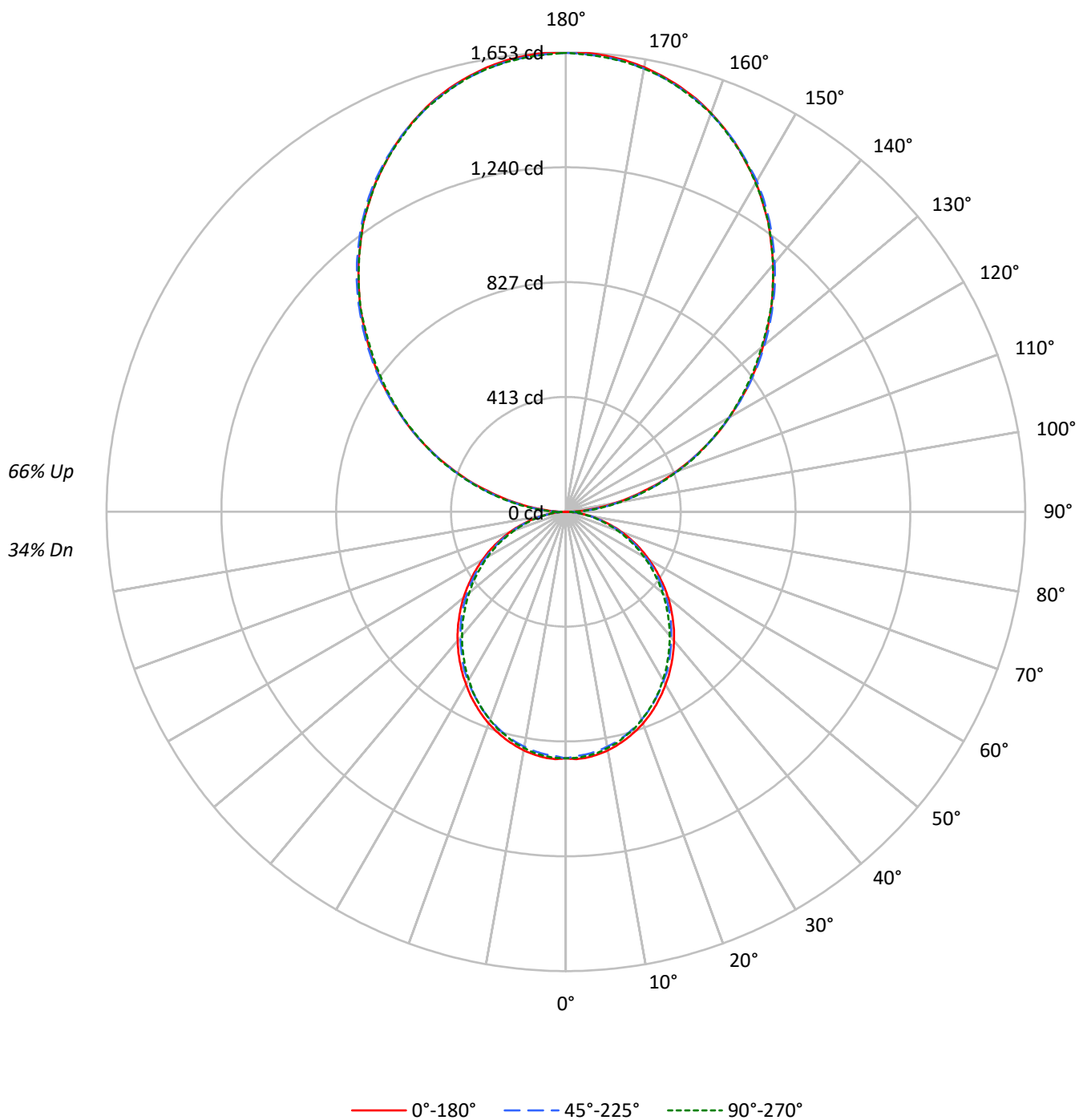
Lumens per Lamp: N/A
Luminaire Lumens: 6888.9 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	50	30	10
RCR																				
0	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41			34
1	94	90	86	83	85	81	78	75	65	63	61	50	49	47	36	35	35			28
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	32	30	29			24
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	26	25			20
4	71	61	53	47	64	55	48	43	44	40	36	34	31	28	25	23	21			17
5	65	54	46	40	59	49	42	37	40	35	31	31	27	25	23	20	18			15
6	60	48	40	35	54	44	37	32	36	30	27	28	24	21	20	18	16			13
7	55	44	36	30	50	40	33	28	32	27	23	25	22	19	19	16	14			12
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13			10
9	48	36	29	24	43	33	26	22	27	22	18	21	18	15	16	13	12			9
10	45	33	26	21	40	30	24	20	25	20	17	19	16	13	15	12	10			8

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	1.2
10°-20°	236.2	3.4
20°-30°	348.8	5.1
30°-40°	407.4	5.9
40°-50°	409.5	5.9
50°-60°	359.8	5.2
60°-70°	267.9	3.9
70°-80°	152.5	2.2
80°-90°	46.8	0.7
90°-100°	106.3	1.5
100°-110°	321.8	4.7
110°-120°	547.8	8.0
120°-130°	720.7	10.5
130°-140°	810.1	11.8
140°-150°	796.4	11.6
150°-160°	670.5	9.7
160°-170°	446.4	6.5
170°-180°	156.3	2.3
0°-30°	668.6	9.7
0°-40°	1076.0	15.6
0°-60°	1845.2	26.8
0°-90°	2312.5	33.6
90°-120°	976.0	14.2
90°-150°	3303.2	47.9
90°-180°	4576.0	66.4
0°-180°	6888.9	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	8
95°	77	86	96	101	101	84
105°	292	294	306	306	309	313
115°	551	555	553	554	553	546
125°	807	811	808	803	798	720
135°	1047	1055	1054	1048	1046	807
145°	1270	1273	1277	1275	1270	793
155°	1454	1454	1456	1461	1452	670
165°	1584	1580	1580	1588	1579	447
175°	1648	1643	1643	1650	1641	157
180°	1652	1652	1652	1652	1652	

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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	14.3	31.1	36.3	38.9
92.5°	38.9	46.7	54.5	58.4	55.8
95°	76.6	85.6	96.0	101.2	101.2
97.5°	125.9	132.3	140.1	146.6	145.3
100°	176.5	184.2	190.7	194.6	197.2
102.5°	234.8	238.7	247.8	251.7	250.4
105°	291.9	294.5	306.2	306.2	308.8
107.5°	359.4	360.7	365.9	369.8	368.5
110°	421.7	424.3	426.9	432.1	429.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	486.6	487.8	487.8	494.3	494.3
115°	551.4	555.3	552.7	554.0	552.7
117.5°	617.6	618.9	616.3	616.3	612.4
120°	678.6	686.4	679.9	678.6	676.0
122.5°	742.2	747.3	744.7	740.9	737.0
125°	807.0	810.9	808.3	803.1	797.9
127.5°	866.7	874.5	871.9	864.1	858.9
130°	926.4	936.8	932.9	927.7	918.6
132.5°	986.1	996.5	993.9	987.4	980.9
135°	1047.1	1054.8	1053.5	1048.4	1045.8
137.5°	1102.9	1109.3	1113.2	1106.7	1102.9
140°	1161.2	1167.7	1169.0	1167.7	1158.6
142.5°	1214.4	1220.9	1223.5	1222.2	1215.7
145°	1270.2	1272.8	1276.7	1275.4	1270.2
147.5°	1318.2	1323.4	1327.3	1327.3	1319.5
150°	1368.8	1371.4	1374.0	1374.0	1366.2
152.5°	1410.4	1414.2	1415.5	1418.1	1411.6
155°	1454.5	1454.5	1455.8	1461.0	1451.9
157.5°	1492.1	1490.8	1492.1	1497.3	1489.5
160°	1527.1	1524.5	1524.5	1531.0	1525.8
162.5°	1558.3	1554.4	1555.7	1562.2	1553.1
165°	1584.2	1580.3	1580.3	1588.1	1579.0
167.5°	1606.3	1601.1	1602.4	1610.2	1602.4
170°	1624.4	1619.2	1619.2	1628.3	1619.2
172.5°	1638.7	1633.5	1633.5	1641.3	1632.2
175°	1647.8	1642.6	1642.6	1650.4	1641.3
177.5°	1653.0	1647.8	1647.8	1655.6	1646.5
180°	1651.7	1651.7	1651.7	1651.7	1651.7

(END OF REPORT)