

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: P1029318

Luminaire Tested: S122DIW-B290D1240UB2750-4F0-XX-W2A-D_3500K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029318
REPORT IS A COMBINATION OF REPORTS P985504 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B290D1240UB2750-4F0-XX-W2A-D_3500K
Description: Define 2 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

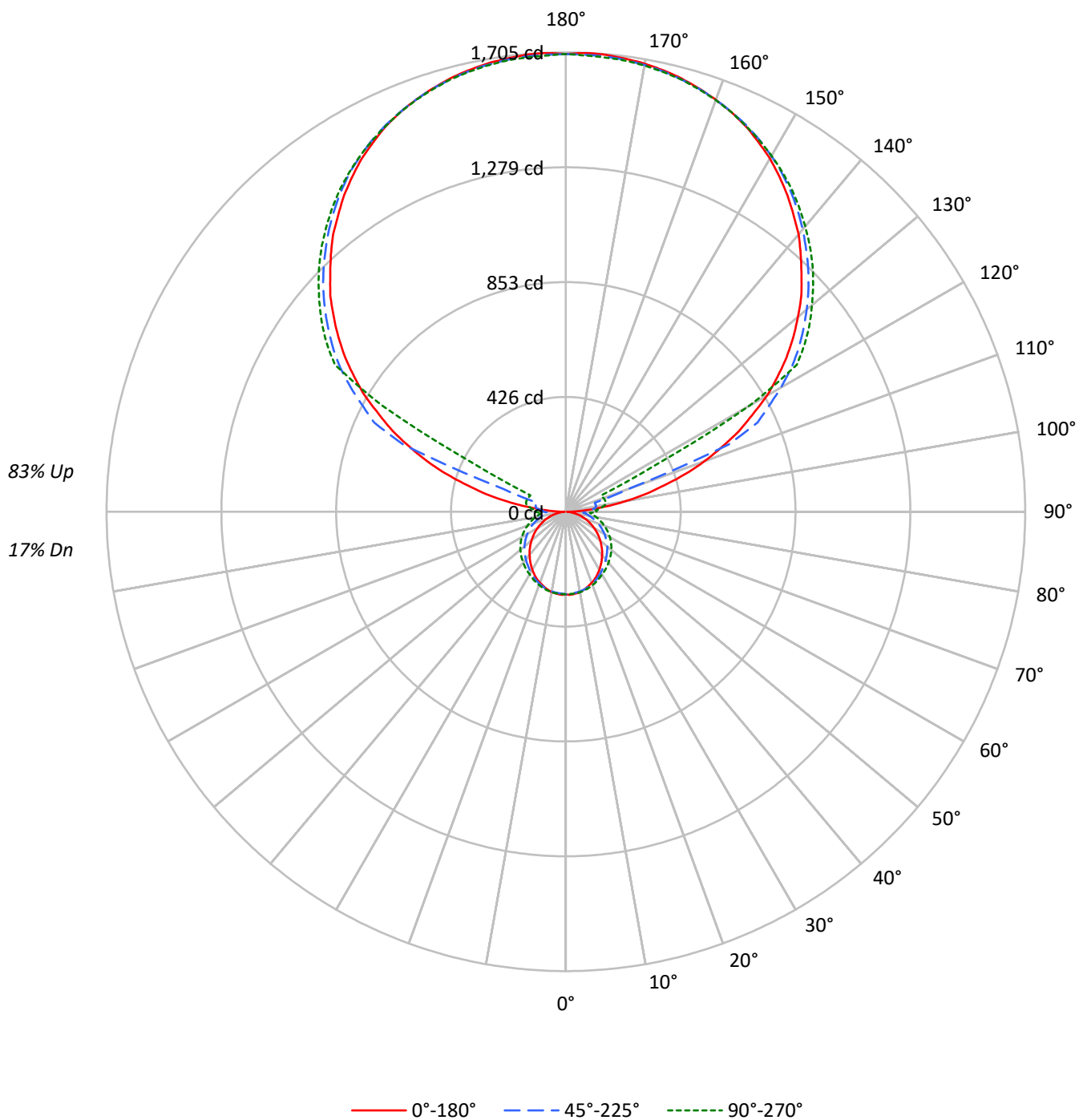
Lumens per Lamp: N/A
Luminaire Lumens: 6152.0 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.1
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	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26
1	90	86	82	78	79	75	72	69	56	54	52	38	37	36	22	21	21
2	82	74	68	63	71	65	60	56	49	45	43	33	31	29	19	18	17
3	74	65	58	52	65	57	51	47	43	39	35	29	27	25	17	15	14
4	68	57	50	44	59	51	44	39	38	33	30	26	23	21	15	13	12
5	62	51	43	37	54	45	38	33	33	29	25	23	20	18	13	12	10
6	57	45	37	32	50	40	33	29	30	25	22	21	18	15	12	10	9
7	52	41	33	28	46	36	29	25	27	22	19	19	16	13	11	9	8
8	48	37	29	24	42	32	26	22	24	20	17	17	14	12	10	8	7
9	45	33	26	21	39	29	23	19	22	18	15	15	13	10	9	7	6
10	42	30	23	19	37	27	21	17	20	16	13	14	11	9	8	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4850	4850	4850
5°	4872	4643	4617
10°	4839	4483	4417
15°	4770	4315	4212
20°	4684	4141	4017
25°	4599	3973	3840
30°	4479	3804	3665
35°	4360	3639	3537
40°	4232	3498	3409
45°	4112	3370	3298
50°	3982	3252	3188
55°	3845	3126	3076
60°	3678	2994	2959
65°	3505	2843	2824
70°	3309	2682	2678
75°	3054	2520	2542
80°	2659	2351	2399
85°	2260	2192	2276

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4112 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.0	0.5
10°-20°	83.3	1.4
20°-30°	126.2	2.1
30°-40°	153.7	2.5
40°-50°	165.4	2.7
50°-60°	160.6	2.6
60°-70°	140.2	2.3
70°-80°	108.0	1.8
80°-90°	75.3	1.2
90°-100°	105.9	1.7
100°-110°	245.2	4.0
110°-120°	577.9	9.4
120°-130°	931.9	15.1
130°-140°	981.3	16.0
140°-150°	907.7	14.8
150°-160°	729.0	11.8
160°-170°	469.8	7.6
170°-180°	161.7	2.6
0°-30°	238.5	3.9
0°-40°	392.2	6.4
0°-60°	718.2	11.7
0°-90°	1041.7	16.9
90°-120°	929.0	15.1
90°-150°	3749.9	61.0
90°-180°	5110.0	83.1
0°-180°	6152.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	306	306	306	306	306	
5°	307	306	303	306	306	29
15°	293	294	294	298	298	83
25°	266	270	274	279	280	123
35°	230	237	246	255	258	143
45°	188	200	216	230	234	145
55°	144	160	183	199	205	129
65°	99	120	146	165	170	98
75°	55	80	108	127	133	58
85°	16	44	72	91	97	17
90°	6	45	83	107	115	8
95°	84	64	99	122	126	97
105°	376	426	113	142	152	402
115°	709	734	785	229	146	697
125°	1000	1016	1054	1074	1082	892
135°	1237	1257	1272	1294	1295	956
145°	1434	1433	1454	1465	1462	897
155°	1580	1568	1583	1590	1581	728
165°	1664	1657	1661	1669	1661	470
175°	1702	1694	1696	1705	1693	162
180°	1699	1699	1699	1699	1699	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	306.4	306.4	306.4	306.4	306.4
2.5°	308.6	307.3	304.1	306.4	305.5
5°	307.3	305.9	303.3	305.9	305.5
7.5°	305.0	304.1	301.9	305.0	304.6
10°	302.4	301.5	300.2	303.7	303.3
12.5°	297.9	298.4	297.5	301.0	300.6
15°	293.0	293.9	293.9	297.9	297.5
17.5°	286.8	288.6	289.9	293.9	293.9
20°	280.6	282.8	284.6	289.5	289.5
22.5°	274.0	276.6	279.3	284.2	285.1
25°	266.4	269.5	273.5	278.8	280.2
27.5°	257.5	262.4	266.9	273.5	274.4
30°	248.6	254.4	260.2	267.3	268.6
32.5°	238.9	245.5	252.6	261.1	263.7
35°	229.6	237.1	245.5	255.3	258.4
37.5°	219.3	227.8	238.4	249.1	252.2
40°	209.1	218.9	230.9	242.4	246.4
42.5°	199.4	209.1	223.3	236.2	240.2
45°	188.3	200.3	215.8	229.6	234.0
47.5°	177.6	190.5	208.2	222.5	227.3
50°	166.5	180.3	200.3	215.3	220.2
52.5°	155.8	170.5	191.8	207.4	212.7
55°	144.3	160.3	183.4	199.4	205.1
57.5°	133.2	151.0	174.1	191.4	197.1
60°	121.2	140.3	165.6	182.5	188.7
62.5°	110.6	130.5	155.8	174.1	179.8
65°	98.6	120.3	146.5	164.7	170.5
67.5°	87.9	110.6	137.2	155.4	161.6
70°	76.4	99.5	127.0	146.1	151.4
72.5°	65.7	89.7	117.7	136.3	143.0
75°	54.6	79.5	107.9	127.0	132.8
77.5°	44.0	69.7	98.6	117.7	123.9
80°	33.3	60.4	89.2	107.9	114.1
82.5°	24.4	51.1	80.4	99.0	104.8
85°	16.0	43.5	71.9	90.6	96.8
87.5°	9.8	36.4	64.8	83.0	88.8
90°	5.6	44.9	83.2	107.1	114.9
92.5°	34.7	53.3	84.1	103.9	110.5
95°	83.5	63.7	99.0	122.0	126.2
97.5°	146.9	65.2	110.7	130.8	137.3
100°	220.7	68.7	114.5	140.7	148.1
102.5°	301.4	313.5	113.8	143.3	151.9
105°	375.9	425.6	113.2	142.2	152.0
107.5°	463.1	504.6	112.5	141.2	151.0
110°	546.3	581.0	247.5	138.8	148.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	625.0	654.2	653.7	138.1	146.7
115°	708.6	734.4	785.0	229.3	145.6
117.5°	780.6	808.8	848.3	685.9	368.3
120°	861.7	882.0	921.9	949.0	788.0
122.5°	930.5	950.7	991.7	1011.1	1016.3
125°	1000.2	1016.2	1053.7	1074.3	1082.0
127.5°	1064.1	1080.8	1111.3	1134.7	1139.9
130°	1124.4	1143.5	1166.4	1190.6	1192.9
132.5°	1185.8	1201.3	1221.5	1242.8	1245.1
135°	1236.9	1256.6	1272.2	1293.8	1294.9
137.5°	1291.0	1305.8	1320.4	1341.1	1340.5
140°	1343.9	1353.3	1367.7	1385.9	1382.4
142.5°	1388.1	1396.3	1412.3	1427.4	1423.5
145°	1434.4	1433.2	1454.1	1465.4	1461.5
147.5°	1475.0	1471.3	1492.2	1498.8	1495.2
150°	1514.3	1505.7	1525.4	1532.8	1526.6
152.5°	1547.5	1537.7	1556.1	1563.5	1554.9
155°	1579.5	1568.4	1583.2	1590.5	1580.7
157.5°	1605.3	1595.5	1606.5	1615.1	1605.3
160°	1627.4	1620.0	1627.4	1634.8	1626.2
162.5°	1647.1	1639.7	1645.9	1654.5	1643.4
165°	1664.3	1656.9	1660.6	1669.2	1660.6
167.5°	1677.8	1670.4	1674.1	1682.7	1671.7
170°	1688.9	1681.5	1684.0	1692.6	1681.5
172.5°	1696.2	1688.9	1691.3	1699.9	1688.9
175°	1702.4	1693.8	1696.2	1704.9	1692.6
177.5°	1704.9	1696.2	1697.5	1706.1	1695.0
180°	1698.7	1698.7	1698.7	1698.7	1698.7

(END OF REPORT)