

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: P1029349

Luminaire Tested: S122DIW-B290D1440UB2750-4F0-XX-W2A-D_4000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029349
REPORT IS A COMBINATION OF REPORTS P985595 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B290D1440UB2750-4F0-XX-W2A-D_4000K
Description: Define 2 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

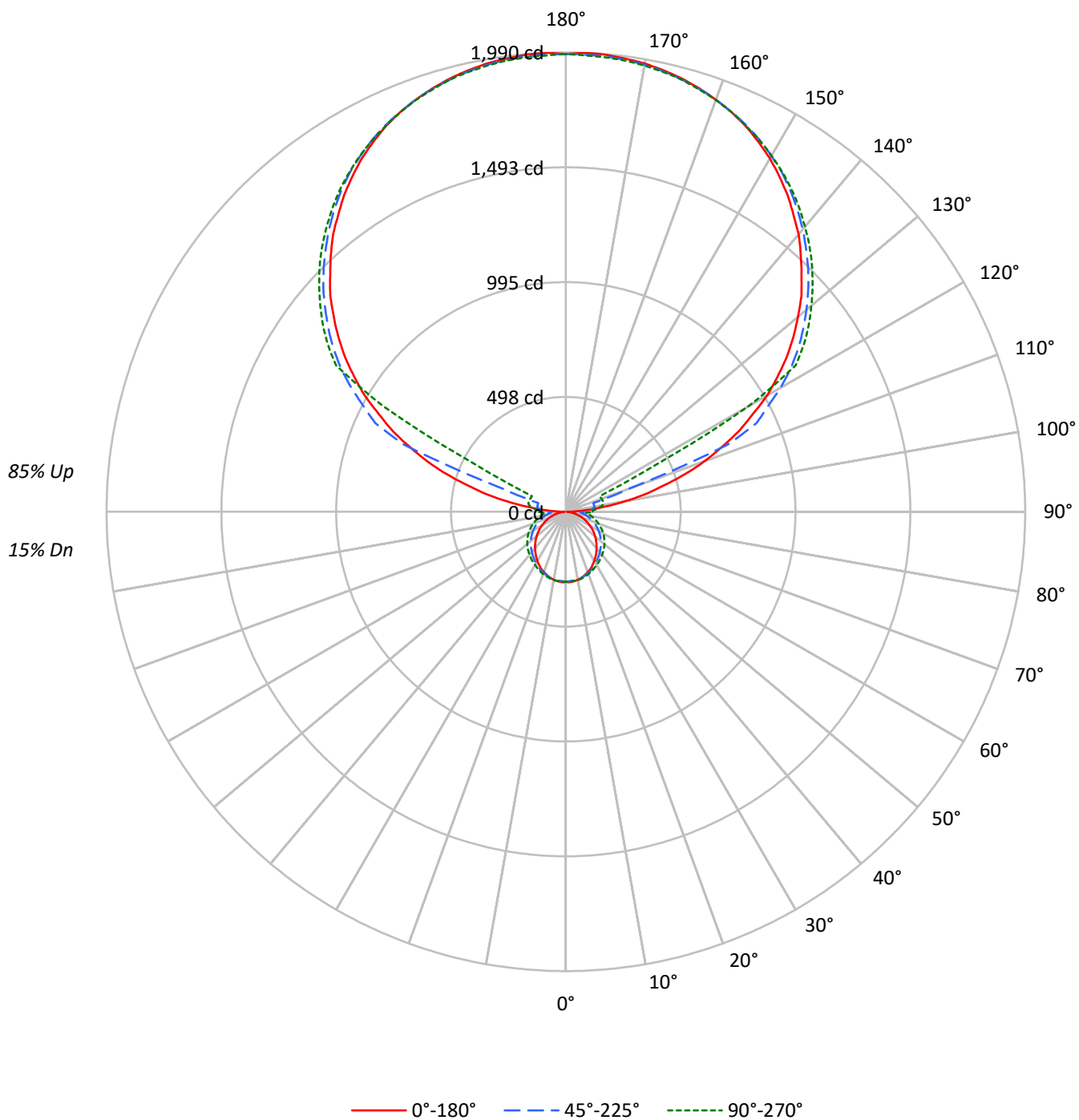
Lumens per Lamp: N/A
Luminaire Lumens: 6975.0 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 65.2
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	99	99	99	99	87	87	87	87	64	64	64	43	43	43	24	24	24			15
1	89	85	81	78	78	75	71	69	55	53	51	37	36	35	20	20	19			12
2	81	74	68	63	71	65	60	56	48	45	42	32	30	28	18	17	16			9
3	74	65	58	52	64	57	51	46	42	38	35	28	26	24	15	14	13			8
4	67	57	50	44	59	50	44	39	37	33	29	25	22	20	14	12	11			6
5	62	51	43	37	54	44	38	33	33	28	25	22	19	17	12	11	10			6
6	57	45	37	32	49	40	33	28	29	25	22	20	17	15	11	9	8			5
7	52	40	33	28	45	36	29	25	26	22	19	18	15	13	10	8	7			4
8	48	36	29	24	42	32	26	21	24	20	16	16	13	11	9	8	6			4
9	45	33	26	21	39	29	23	19	22	17	14	15	12	10	8	7	6			3
10	42	30	23	19	36	27	21	17	20	16	13	14	11	9	8	6	5			3

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4804	4804	4804
5°	4826	4599	4573
10°	4793	4439	4375
15°	4726	4275	4172
20°	4641	4101	3979
25°	4556	3936	3803
30°	4438	3767	3631
35°	4319	3605	3504
40°	4194	3465	3377
45°	4073	3338	3267
50°	3943	3221	3159
55°	3808	3097	3048
60°	3644	2967	2931
65°	3470	2816	2797
70°	3278	2657	2654
75°	3026	2497	2517
80°	2635	2330	2376
85°	2232	2174	2255

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4073 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.8	0.4
10°-20°	82.5	1.2
20°-30°	125.0	1.8
30°-40°	152.2	2.2
40°-50°	163.8	2.3
50°-60°	159.1	2.3
60°-70°	138.9	2.0
70°-80°	106.9	1.5
80°-90°	75.1	1.1
90°-100°	114.8	1.6
100°-110°	279.8	4.0
110°-120°	670.3	9.6
120°-130°	1085.5	15.6
130°-140°	1144.5	16.4
140°-150°	1059.5	15.2
150°-160°	851.0	12.2
160°-170°	548.4	7.9
170°-180°	188.7	2.7
0°-30°	236.3	3.4
0°-40°	388.5	5.6
0°-60°	711.5	10.2
0°-90°	1032.4	14.8
90°-120°	1065.0	15.3
90°-150°	4354.5	62.4
90°-180°	5943.0	85.2
0°-180°	6975.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	304	304	304	304	304	
5°	304	303	300	303	303	29
15°	290	291	291	295	295	82
25°	264	267	271	276	278	121
35°	227	235	243	253	256	142
45°	186	198	214	227	232	144
55°	143	159	182	198	203	128
65°	98	119	145	163	169	97
75°	54	79	107	126	132	57
85°	16	43	71	90	96	17
90°	6	47	87	112	120	8
95°	97	70	107	130	134	113
105°	438	494	125	156	167	469
115°	827	856	912	261	162	814
125°	1168	1186	1228	1249	1258	1041
135°	1444	1467	1484	1508	1508	1116
145°	1674	1673	1698	1710	1705	1047
155°	1844	1831	1848	1857	1845	850
165°	1943	1934	1938	1949	1938	549
175°	1987	1977	1980	1990	1976	189
180°	1983	1983	1983	1983	1983	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	303.5	303.5	303.5	303.5	303.5
2.5°	305.7	304.4	301.3	303.5	302.6
5°	304.4	303.0	300.4	303.0	302.6
7.5°	302.2	301.3	299.1	302.2	301.7
10°	299.5	298.6	297.3	300.8	300.4
12.5°	295.1	295.6	294.7	298.2	297.8
15°	290.3	291.2	291.2	295.1	294.7
17.5°	284.1	285.9	287.2	291.2	291.2
20°	278.0	280.2	281.9	286.8	286.8
22.5°	271.4	274.0	276.7	281.5	282.4
25°	263.9	267.0	270.9	276.2	277.5
27.5°	255.1	259.9	264.3	270.9	271.8
30°	246.3	252.0	257.7	264.8	266.1
32.5°	236.6	243.2	250.3	258.6	261.3
35°	227.4	234.9	243.2	252.9	256.0
37.5°	217.3	225.6	236.2	246.7	249.8
40°	207.2	216.8	228.7	240.2	244.1
42.5°	197.5	207.2	221.2	234.0	238.0
45°	186.5	198.4	213.8	227.4	231.8
47.5°	175.9	188.7	206.3	220.4	225.2
50°	164.9	178.6	198.4	213.3	218.2
52.5°	154.4	168.9	190.0	205.4	210.7
55°	142.9	158.8	181.7	197.5	203.2
57.5°	132.0	149.5	172.4	189.6	195.3
60°	120.1	139.0	164.1	180.8	186.9
62.5°	109.5	129.3	154.4	172.4	178.1
65°	97.6	119.2	145.1	163.2	168.9
67.5°	87.1	109.5	135.9	153.9	160.1
70°	75.7	98.5	125.8	144.7	150.0
72.5°	65.1	88.8	116.6	135.0	141.6
75°	54.1	78.7	106.9	125.8	131.5
77.5°	43.5	69.1	97.6	116.6	122.7
80°	33.0	59.8	88.4	106.9	113.0
82.5°	24.2	50.6	79.6	98.1	103.8
85°	15.8	43.1	71.3	89.7	95.9
87.5°	9.7	36.1	64.2	82.2	88.0
90°	5.8	47.1	86.8	111.6	119.6
92.5°	39.9	57.4	88.5	108.6	115.2
95°	96.8	70.1	106.6	130.4	134.3
97.5°	171.0	72.2	120.7	141.3	148.0
100°	257.1	76.8	125.8	153.6	161.2
102.5°	351.3	363.0	125.6	157.1	166.3
105°	438.4	494.3	125.3	156.5	167.2
107.5°	540.3	586.8	125.1	155.9	166.4
110°	637.5	676.4	283.2	153.8	164.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	729.3	762.1	757.9	153.6	162.7
115°	826.9	856.1	911.7	260.6	162.1
117.5°	911.0	943.2	986.1	794.1	422.6
120°	1005.7	1029.0	1072.5	1102.0	913.1
122.5°	1086.1	1109.5	1154.4	1174.9	1180.4
125°	1167.5	1186.1	1227.5	1249.3	1257.6
127.5°	1242.1	1261.7	1295.1	1320.4	1325.9
130°	1312.4	1334.8	1359.9	1386.2	1388.4
132.5°	1384.1	1402.3	1424.7	1447.8	1449.8
135°	1443.9	1466.9	1484.2	1507.8	1508.4
137.5°	1507.0	1524.3	1540.8	1563.6	1562.3
140°	1568.7	1579.8	1596.5	1616.4	1611.9
142.5°	1620.4	1630.0	1648.7	1665.5	1660.5
145°	1674.5	1673.1	1697.5	1710.1	1705.1
147.5°	1721.9	1717.6	1742.0	1749.5	1745.2
150°	1767.8	1757.7	1780.7	1789.3	1782.1
152.5°	1806.5	1795.0	1816.6	1825.2	1815.1
155°	1843.8	1830.9	1848.1	1856.7	1845.3
157.5°	1874.0	1862.5	1875.4	1885.4	1874.0
160°	1899.8	1891.2	1899.8	1908.4	1898.4
162.5°	1922.8	1914.1	1921.3	1931.4	1918.4
165°	1942.8	1934.2	1938.5	1948.6	1938.5
167.5°	1958.6	1950.0	1954.3	1964.4	1951.4
170°	1971.5	1962.9	1965.8	1975.8	1962.9
172.5°	1980.1	1971.5	1974.4	1984.5	1971.5
175°	1987.3	1977.3	1980.1	1990.2	1975.8
177.5°	1990.2	1980.1	1981.6	1991.6	1978.7
180°	1983.0	1983.0	1983.0	1983.0	1983.0

(END OF REPORT)