

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: P1029350

Luminaire Tested: S122DIW-B290D1440UB2750-4F0-XX-W2A-D_5000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029350
REPORT IS A COMBINATION OF REPORTS P985596 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_5000K
Description: Define 2 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

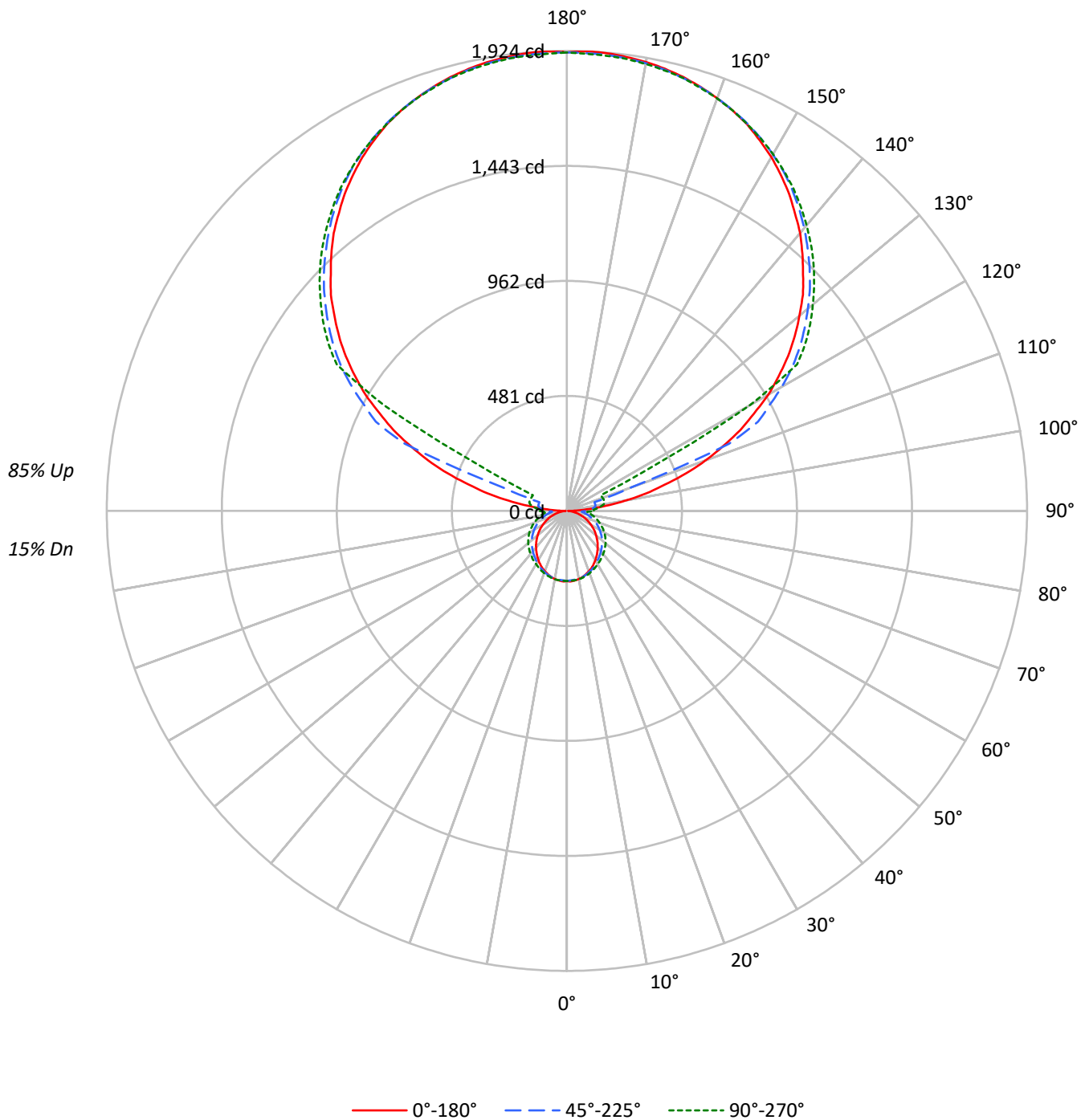
Lumens per Lamp: N/A
Luminaire Lumens: 6744.1 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	4643	4643	4643
5°	4663	4444	4419
10°	4631	4290	4228
15°	4566	4131	4032
20°	4484	3963	3845
25°	4402	3803	3676
30°	4288	3641	3508
35°	4172	3483	3386
40°	4052	3348	3264
45°	3936	3226	3157
50°	3812	3112	3052
55°	3680	2991	2946
60°	3520	2866	2832
65°	3356	2723	2703
70°	3166	2568	2563
75°	2926	2413	2433
80°	2547	2250	2296
85°	2161	2101	2180

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3936 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.8	0.4
10°-20°	79.7	1.2
20°-30°	120.8	1.8
30°-40°	147.1	2.2
40°-50°	158.3	2.3
50°-60°	153.7	2.3
60°-70°	134.3	2.0
70°-80°	103.3	1.5
80°-90°	72.6	1.1
90°-100°	111.0	1.6
100°-110°	270.6	4.0
110°-120°	648.2	9.6
120°-130°	1049.7	15.6
130°-140°	1106.7	16.4
140°-150°	1024.5	15.2
150°-160°	822.9	12.2
160°-170°	530.3	7.9
170°-180°	182.5	2.7
0°-30°	228.3	3.4
0°-40°	375.5	5.6
0°-60°	687.5	10.2
0°-90°	997.6	14.8
90°-120°	1029.8	15.3
90°-150°	4210.7	62.4
90°-180°	5746.0	85.2
0°-180°	6744.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	293	293	293	293	293	
5°	294	293	290	293	292	28
15°	280	281	281	285	285	79
25°	255	258	262	267	268	117
35°	220	227	235	244	247	137
45°	180	192	207	220	224	139
55°	138	153	176	191	196	124
65°	94	115	140	158	163	94
75°	52	76	103	122	127	55
85°	15	42	69	87	93	16
90°	6	46	84	108	116	8
95°	94	68	103	126	130	109
105°	424	478	121	151	162	453
115°	800	828	882	252	157	787
125°	1129	1147	1187	1208	1216	1007
135°	1396	1418	1435	1458	1459	1079
145°	1619	1618	1641	1654	1649	1013
155°	1783	1770	1787	1796	1784	822
165°	1879	1870	1875	1884	1875	531
175°	1922	1912	1915	1924	1911	183
180°	1918	1918	1918	1918	1918	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	293.3	293.3	293.3	293.3	293.3
2.5°	295.4	294.1	291.1	293.3	292.4
5°	294.1	292.8	290.3	292.8	292.4
7.5°	292.0	291.1	289.0	292.0	291.6
10°	289.4	288.6	287.3	290.7	290.3
12.5°	285.2	285.6	284.8	288.2	287.7
15°	280.5	281.4	281.4	285.2	284.8
17.5°	274.6	276.3	277.5	281.4	281.4
20°	268.6	270.7	272.4	277.1	277.1
22.5°	262.2	264.8	267.3	272.0	272.9
25°	255.0	258.0	261.8	266.9	268.2
27.5°	246.5	251.2	255.4	261.8	262.7
30°	238.0	243.5	249.1	255.9	257.1
32.5°	228.7	235.0	241.8	249.9	252.5
35°	219.7	227.0	235.0	244.4	247.4
37.5°	210.0	218.0	228.2	238.4	241.4
40°	200.2	209.5	221.0	232.1	235.9
42.5°	190.8	200.2	213.8	226.1	229.9
45°	180.2	191.7	206.6	219.7	224.0
47.5°	170.0	182.3	199.3	212.9	217.6
50°	159.4	172.6	191.7	206.1	210.8
52.5°	149.2	163.2	183.6	198.5	203.6
55°	138.1	153.4	175.5	190.8	196.4
57.5°	127.5	144.5	166.6	183.2	188.7
60°	116.0	134.3	158.5	174.7	180.6
62.5°	105.8	125.0	149.2	166.6	172.1
65°	94.4	115.2	140.3	157.7	163.2
67.5°	84.2	105.8	131.3	148.8	154.7
70°	73.1	95.2	121.6	139.8	144.9
72.5°	62.9	85.9	112.6	130.5	136.9
75°	52.3	76.1	103.3	121.6	127.1
77.5°	42.1	66.7	94.4	112.6	118.6
80°	31.9	57.8	85.4	103.3	109.2
82.5°	23.4	48.9	76.9	94.8	100.3
85°	15.3	41.7	68.9	86.7	92.7
87.5°	9.4	34.9	62.1	79.5	85.0
90°	5.7	45.6	83.9	107.8	115.7
92.5°	38.5	55.5	85.6	105.0	111.5
95°	93.6	67.8	103.0	126.1	129.8
97.5°	165.3	69.9	116.7	136.5	143.0
100°	248.6	74.2	121.6	148.4	155.9
102.5°	339.8	351.0	121.4	151.9	160.8
105°	423.9	477.9	121.2	151.3	161.6
107.5°	522.4	567.3	121.0	150.7	160.9
110°	616.4	654.0	273.8	148.7	158.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	705.2	737.0	733.0	148.5	157.3
115°	799.5	827.8	881.6	252.0	156.7
117.5°	881.0	912.1	953.5	767.9	408.6
120°	972.6	995.1	1037.1	1065.6	883.0
122.5°	1050.3	1072.9	1116.3	1136.1	1141.3
125°	1129.0	1147.0	1187.0	1208.1	1216.1
127.5°	1201.1	1220.0	1252.4	1276.8	1282.1
130°	1269.1	1290.8	1315.1	1340.5	1342.5
132.5°	1338.5	1356.0	1377.7	1400.0	1402.0
135°	1396.3	1418.5	1435.2	1458.0	1458.6
137.5°	1457.3	1474.0	1490.0	1511.9	1510.7
140°	1517.0	1527.7	1543.8	1563.1	1558.7
142.5°	1566.9	1576.2	1594.3	1610.5	1605.6
145°	1619.2	1617.9	1641.4	1653.8	1648.9
147.5°	1665.0	1660.9	1684.5	1691.8	1687.5
150°	1709.4	1699.7	1721.9	1730.2	1723.3
152.5°	1746.9	1735.8	1756.6	1764.9	1755.2
155°	1783.0	1770.5	1787.1	1795.5	1784.4
157.5°	1812.1	1801.0	1813.5	1823.2	1812.1
160°	1837.1	1828.8	1837.1	1845.4	1835.7
162.5°	1859.3	1851.0	1857.9	1867.6	1855.1
165°	1878.7	1870.4	1874.6	1884.3	1874.6
167.5°	1894.0	1885.7	1889.8	1899.5	1887.0
170°	1906.5	1898.1	1900.9	1910.6	1898.1
172.5°	1914.8	1906.5	1909.2	1919.0	1906.5
175°	1921.7	1912.0	1914.8	1924.5	1910.6
177.5°	1924.5	1914.8	1916.2	1925.9	1913.4
180°	1917.6	1917.6	1917.6	1917.6	1917.6

(END OF REPORT)