

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: P1029353

Luminaire Tested: S122DIW-B290D1440UB2750-4F0-XX-W2A-F1_3500K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029353
REPORT IS A COMBINATION OF REPORTS P985599 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-F1_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

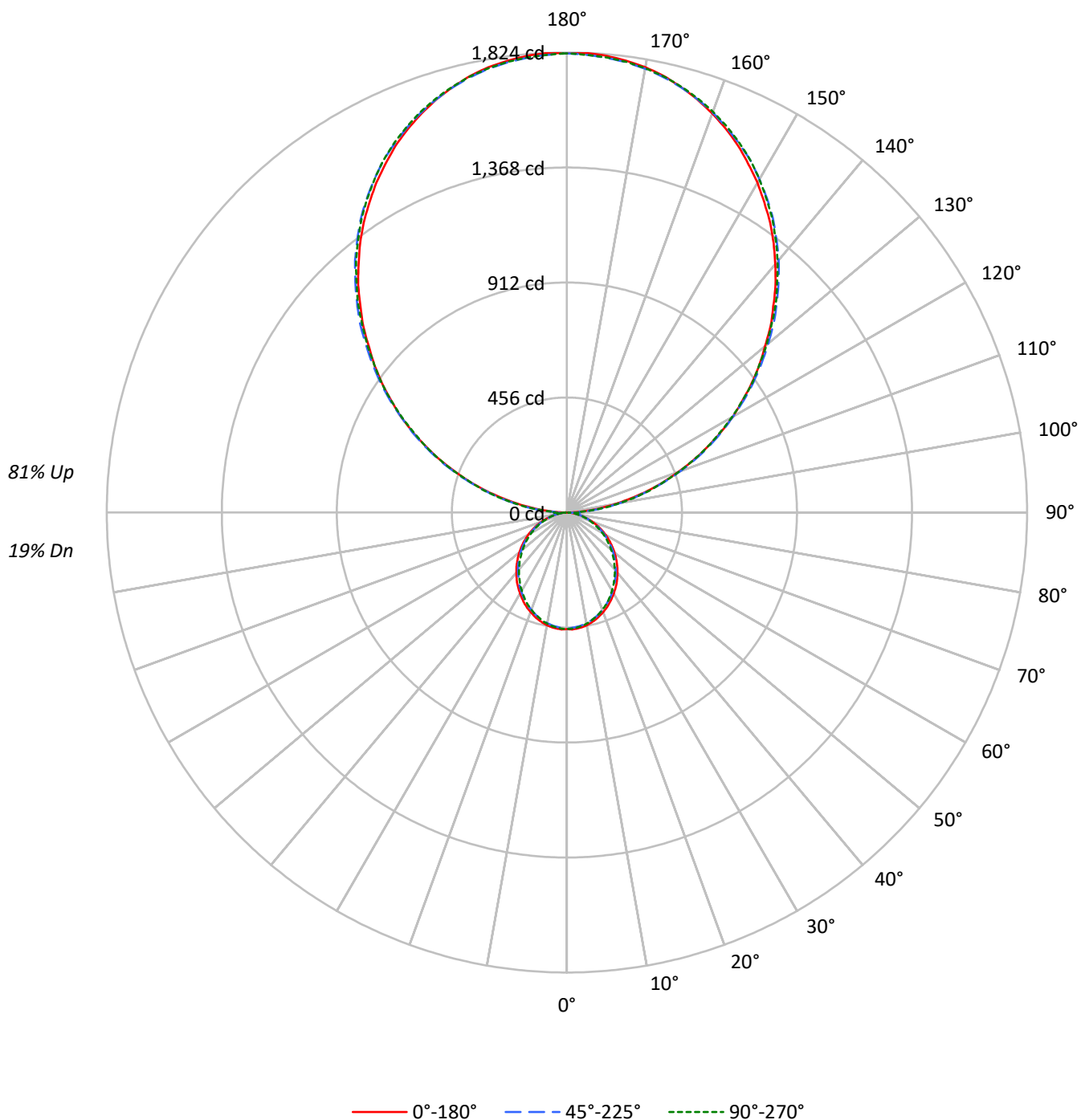
Lumens per Lamp: N/A
Luminaire Lumens: 6270.0 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	100	100	100	100	88	88	88	88	66	66	66	46	46	46	27	27	27			19
1	91	87	83	80	80	77	73	71	58	56	54	40	39	38	24	24	23			16
2	83	76	70	65	73	67	62	58	50	47	44	35	33	32	21	20	19			13
3	75	66	59	54	66	59	53	48	44	41	37	31	29	27	19	18	17			11
4	69	59	51	45	60	52	46	41	39	35	32	28	25	23	17	15	14			10
5	63	52	44	39	55	46	40	35	35	31	27	25	22	20	15	14	12			8
6	58	46	39	33	51	41	35	30	31	27	23	22	19	17	14	12	11			7
7	53	42	34	29	47	37	31	26	28	24	20	20	17	15	12	11	10			7
8	49	38	30	25	43	34	27	23	26	21	18	18	15	13	11	10	9			6
9	46	34	27	22	40	30	24	20	23	19	16	17	14	12	10	9	8			5
10	43	31	24	20	38	28	22	18	21	17	14	15	13	11	10	8	7			5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7310	7310	7310
5°	7322	6969	6918
10°	7262	6651	6518
15°	7156	6331	6099
20°	7013	5983	5700
25°	6870	5619	5302
30°	6688	5277	4883
35°	6520	4917	4473
40°	6309	4562	4085
45°	6100	4210	3706
50°	5873	3850	3311
55°	5633	3467	2937
60°	5362	3050	2548
65°	5066	2628	2140
70°	4694	2167	1728
75°	4173	1670	1334
80°	3545	1136	860
85°	2571	528	364

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6100 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.5	0.7
10°-20°	122.3	2.0
20°-30°	179.7	2.9
30°-40°	208.7	3.3
40°-50°	208.5	3.3
50°-60°	181.8	2.9
60°-70°	134.4	2.1
70°-80°	76.0	1.2
80°-90°	25.3	0.4
90°-100°	112.6	1.8
100°-110°	358.0	5.7
110°-120°	612.6	9.8
120°-130°	805.7	12.8
130°-140°	904.3	14.4
140°-150°	886.9	14.1
150°-160°	743.9	11.9
160°-170°	493.4	7.9
170°-180°	172.4	2.8
0°-30°	345.5	5.5
0°-40°	554.2	8.8
0°-60°	944.5	15.1
0°-90°	1180.2	18.8
90°-120°	1083.2	17.3
90°-150°	3680.1	58.7
90°-180°	5090.0	81.2
0°-180°	6270.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	462	462	462	462	462	
5°	462	460	455	459	458	44
15°	440	437	431	433	431	124
25°	398	394	387	388	387	183
35°	343	339	332	329	327	214
45°	279	276	270	265	263	216
55°	211	209	203	198	196	189
65°	142	140	135	131	129	141
75°	75	74	72	69	70	80
85°	18	18	17	16	16	20
90°	2	20	54	51	52	6
95°	80	95	98	98	95	89
105°	330	335	338	341	341	349
115°	614	624	621	619	614	608
125°	894	908	903	899	897	799
135°	1157	1174	1177	1175	1171	894
145°	1404	1415	1424	1426	1420	877
155°	1605	1610	1615	1622	1618	739
165°	1747	1745	1745	1756	1748	493
175°	1817	1813	1810	1820	1811	173
180°	1820	1820	1820	1820	1820	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	461.8	461.8	461.8	461.8	461.8
2.5°	464.5	462.3	457.4	461.8	461.0
5°	461.8	460.1	455.2	458.7	457.8
7.5°	458.7	456.1	451.2	454.7	453.8
10°	453.8	450.7	445.4	449.0	447.6
12.5°	447.2	444.5	439.2	441.4	440.5
15°	439.6	437.0	431.2	433.0	430.8
17.5°	430.3	427.6	421.9	424.1	421.9
20°	420.1	417.4	411.2	412.5	410.8
22.5°	409.9	405.9	400.1	400.1	399.2
25°	397.9	394.3	386.8	387.7	386.8
27.5°	384.6	381.5	375.7	374.4	372.1
30°	371.2	367.7	361.0	359.7	357.9
32.5°	357.0	354.4	347.3	344.6	342.8
35°	343.3	338.8	331.7	329.1	326.8
37.5°	327.7	323.7	316.6	313.5	311.3
40°	311.7	308.2	301.1	297.1	295.3
42.5°	296.2	292.6	285.5	281.1	278.4
45°	279.3	276.2	269.6	264.7	262.9
47.5°	262.9	259.8	252.7	247.8	245.1
50°	245.6	243.4	237.1	230.9	228.7
52.5°	228.7	225.6	219.8	214.9	211.8
55°	211.4	208.7	203.4	198.1	195.8
57.5°	194.1	191.8	186.1	180.7	179.0
60°	176.7	175.0	168.7	163.9	162.5
62.5°	159.9	156.8	152.3	147.9	146.1
65°	142.5	139.9	135.4	131.4	129.2
67.5°	124.8	122.6	118.6	115.5	113.7
70°	108.4	106.6	102.6	99.5	97.7
72.5°	91.5	89.7	87.5	84.4	83.0
75°	74.6	73.7	71.5	68.8	69.7
77.5°	59.5	57.7	56.8	55.5	54.2
80°	44.4	44.0	43.1	41.7	40.9
82.5°	30.2	30.2	29.8	28.0	28.0
85°	18.2	17.8	17.3	16.0	15.5
87.5°	8.0	7.1	6.2	4.9	4.4
90°	1.5	20.0	53.8	50.7	52.2
92.5°	33.8	46.1	47.6	49.2	49.2
95°	79.9	95.3	98.3	98.3	95.3
97.5°	133.7	147.5	153.6	153.6	153.6
100°	195.1	207.4	212.0	212.0	210.5
102.5°	259.6	268.9	275.0	276.5	275.0
105°	330.3	334.9	338.0	341.1	341.1
107.5°	401.0	407.1	407.1	408.7	401.0
110°	468.6	477.8	477.8	477.8	473.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	542.3	551.5	550.0	545.4	542.3
115°	614.5	623.7	620.7	619.1	614.5
117.5°	686.7	699.0	691.3	686.7	682.1
120°	758.9	771.2	758.9	758.9	754.3
122.5°	825.0	840.4	832.7	828.1	825.0
125°	894.1	908.0	903.3	898.7	897.2
127.5°	961.7	978.6	972.5	966.3	961.7
130°	1024.7	1044.7	1041.6	1038.5	1032.4
132.5°	1095.4	1110.7	1112.3	1104.6	1100.0
135°	1156.8	1173.7	1176.8	1175.3	1170.7
137.5°	1224.4	1238.3	1241.3	1239.8	1233.6
140°	1284.3	1298.2	1305.9	1305.9	1299.7
142.5°	1345.8	1359.6	1364.2	1365.8	1359.6
145°	1404.2	1414.9	1424.2	1425.7	1419.5
147.5°	1456.4	1470.2	1476.4	1479.5	1473.3
150°	1510.2	1519.4	1525.5	1530.2	1525.5
152.5°	1557.8	1567.0	1574.7	1580.9	1574.7
155°	1605.4	1610.0	1614.7	1622.3	1617.7
157.5°	1646.9	1650.0	1653.1	1663.8	1656.1
160°	1683.8	1686.9	1688.4	1697.6	1691.5
162.5°	1717.6	1717.6	1719.1	1729.9	1722.2
165°	1746.8	1745.2	1745.2	1756.0	1748.3
167.5°	1772.9	1768.3	1768.3	1779.0	1771.4
170°	1792.9	1788.3	1786.7	1797.5	1788.3
172.5°	1806.7	1802.1	1800.5	1811.3	1802.1
175°	1817.4	1812.8	1809.8	1820.5	1811.3
177.5°	1823.6	1819.0	1815.9	1825.1	1815.9
180°	1820.5	1820.5	1820.5	1820.5	1820.5

(END OF REPORT)