

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: P1029323

Luminaire Tested: S122DIW-B290D1240UB2750-4F0-XX-W2A-F1_3500K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029323
REPORT IS A COMBINATION OF REPORTS P985509 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-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

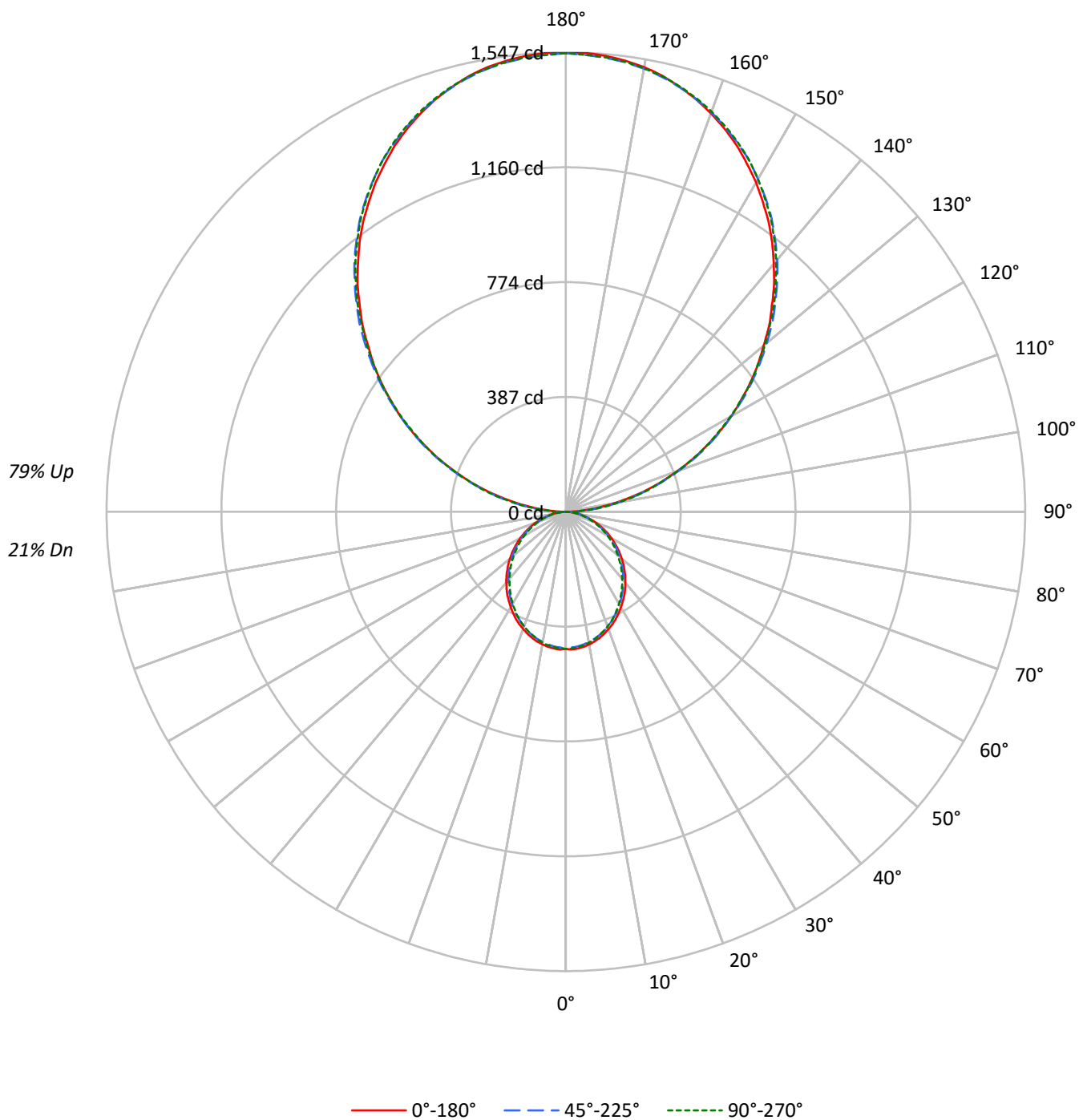
Lumens per Lamp: N/A
Luminaire Lumens: 5496.0 lumens
Efficiency: N/A
Efficacy: 99.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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	50	30	10
RCR																				
0	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30	30	30	21
1	91	87	84	80	81	77	74	72	59	57	55	42	41	40	26	26	25	25	25	18
2	83	76	70	65	73	68	63	59	52	48	46	37	35	33	23	22	21	21	21	15
3	76	67	60	54	67	59	54	49	45	41	38	33	30	28	21	19	18	18	18	13
4	69	59	51	46	61	52	46	41	40	36	32	29	26	24	18	17	15	15	15	11
5	63	52	45	39	56	47	40	35	36	31	28	26	23	21	16	15	13	13	13	10
6	58	47	39	34	51	42	35	30	32	28	24	23	20	18	15	13	12	12	12	8
7	54	42	34	29	47	38	31	26	29	24	21	21	18	16	14	12	10	10	10	7
8	50	38	31	26	44	34	28	23	26	22	18	19	16	14	12	11	9	9	9	7
9	46	34	27	23	41	31	25	20	24	20	16	18	15	12	11	10	8	8	8	6
10	43	31	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8	8	8	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	0.8
10°-20°	122.3	2.2
20°-30°	179.7	3.3
30°-40°	208.7	3.8
40°-50°	208.5	3.8
50°-60°	181.8	3.3
60°-70°	134.4	2.4
70°-80°	76.0	1.4
80°-90°	24.5	0.4
90°-100°	95.5	1.7
100°-110°	303.6	5.5
110°-120°	519.5	9.5
120°-130°	683.3	12.4
130°-140°	767.0	14.0
140°-150°	752.1	13.7
150°-160°	630.9	11.5
160°-170°	418.4	7.6
170°-180°	146.2	2.7
0°-30°	345.5	6.3
0°-40°	554.2	10.1
0°-60°	944.5	17.2
0°-90°	1179.4	21.5
90°-120°	918.7	16.7
90°-150°	3121.0	56.8
90°-180°	4317.0	78.5
0°-180°	5496.0	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°	1	17	46	43	44	5
95°	68	81	83	83	81	76
105°	280	284	287	289	289	296
115°	521	529	526	525	521	516
125°	758	770	766	762	761	678
135°	981	995	998	997	993	758
145°	1191	1200	1208	1209	1204	744
155°	1362	1366	1369	1376	1372	627
165°	1481	1480	1480	1489	1483	418
175°	1541	1537	1535	1544	1536	146
180°	1544	1544	1544	1544	1544	

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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°	1.3	16.9	45.6	43.0	44.3
92.5°	28.7	39.1	40.4	41.7	41.7
95°	67.8	80.8	83.4	83.4	80.8
97.5°	113.4	125.1	130.3	130.3	130.3
100°	165.5	175.9	179.8	179.8	178.5
102.5°	220.2	228.0	233.2	234.5	233.2
105°	280.1	284.0	286.6	289.2	289.2
107.5°	340.1	345.3	345.3	346.6	340.1
110°	397.4	405.2	405.2	405.2	401.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	459.9	467.7	466.4	462.5	459.9
115°	521.2	529.0	526.4	525.1	521.2
117.5°	582.4	592.8	586.3	582.4	578.5
120°	643.6	654.1	643.6	643.6	639.7
122.5°	699.7	712.7	706.2	702.3	699.7
125°	758.3	770.0	766.1	762.2	760.9
127.5°	815.6	830.0	824.7	819.5	815.6
130°	869.0	886.0	883.4	880.8	875.6
132.5°	929.0	942.0	943.3	936.8	932.9
135°	981.1	995.4	998.0	996.7	992.8
137.5°	1038.4	1050.2	1052.8	1051.5	1046.2
140°	1089.2	1101.0	1107.5	1107.5	1102.3
142.5°	1141.4	1153.1	1157.0	1158.3	1153.1
145°	1190.9	1200.0	1207.8	1209.1	1203.9
147.5°	1235.2	1246.9	1252.1	1254.7	1249.5
150°	1280.8	1288.6	1293.8	1297.7	1293.8
152.5°	1321.2	1329.0	1335.5	1340.7	1335.5
155°	1361.5	1365.5	1369.4	1375.9	1372.0
157.5°	1396.7	1399.3	1401.9	1411.1	1404.5
160°	1428.0	1430.6	1431.9	1439.7	1434.5
162.5°	1456.7	1456.7	1458.0	1467.1	1460.6
165°	1481.4	1480.1	1480.1	1489.2	1482.7
167.5°	1503.6	1499.7	1499.7	1508.8	1502.3
170°	1520.5	1516.6	1515.3	1524.4	1516.6
172.5°	1532.2	1528.3	1527.0	1536.1	1528.3
175°	1541.3	1537.4	1534.8	1544.0	1536.1
177.5°	1546.6	1542.7	1540.0	1547.9	1540.0
180°	1544.0	1544.0	1544.0	1544.0	1544.0

(END OF REPORT)