

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: P1029320

Luminaire Tested: S122DIW-B290D1240UB2750-4F0-XX-W2A-D_5000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029320
REPORT IS A COMBINATION OF REPORTS P985506 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_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

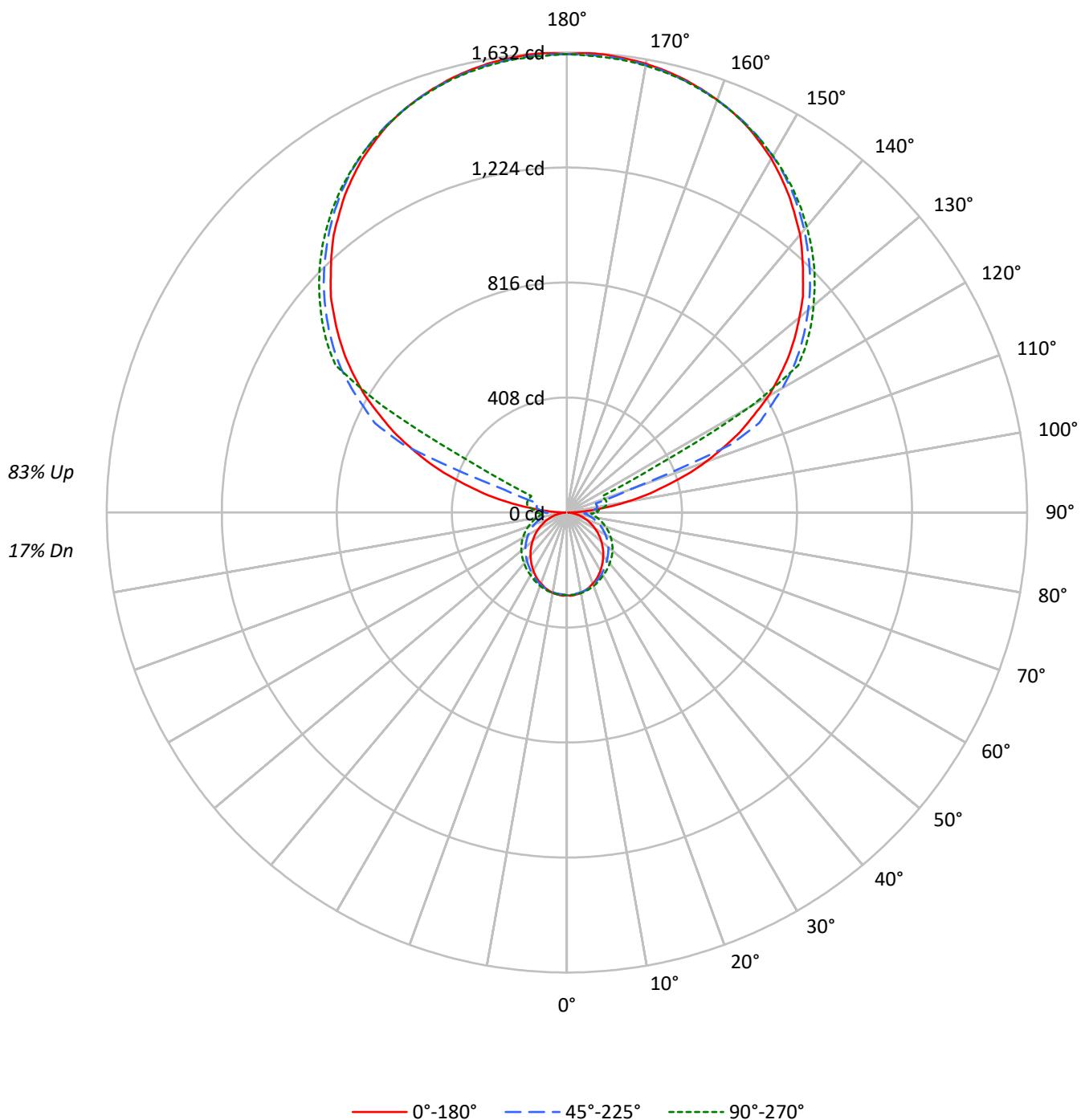
Lumens per Lamp: N/A
Luminaire Lumens: 5889.1 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P1029320

CATALOG NUMBER: S122DIW-B290D1240UB2750-4F0-XX-W2A-D_5000K

Luminous Intensity Polar Plot



TEST NUMBER: P1029320

CATALOG NUMBER: S122DIW-B290D1240UB2750-4F0-XX-W2A-D_5000K

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°	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

TEST NUMBER: P1029320

CATALOG NUMBER: S122DIW-B290D1240UB2750-4F0-XX-W2A-D_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.8	0.5
10°-20°	79.7	1.4
20°-30°	120.8	2.1
30°-40°	147.1	2.5
40°-50°	158.3	2.7
50°-60°	153.7	2.6
60°-70°	134.3	2.3
70°-80°	103.3	1.8
80°-90°	72.1	1.2
90°-100°	101.4	1.7
100°-110°	234.7	4.0
110°-120°	553.2	9.4
120°-130°	892.1	15.1
130°-140°	939.3	16.0
140°-150°	868.9	14.8
150°-160°	697.9	11.9
160°-170°	449.7	7.6
170°-180°	154.8	2.6
0°-30°	228.3	3.9
0°-40°	375.5	6.4
0°-60°	687.5	11.7
0°-90°	997.1	16.9
90°-120°	889.3	15.1
90°-150°	3589.6	61.0
90°-180°	4892.0	83.1
0°-180°	5889.1	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	43	80	102	110	7
95°	80	61	95	117	121	93
105°	360	408	108	136	146	385
115°	678	703	752	220	139	668
125°	958	973	1009	1028	1036	854
135°	1184	1203	1218	1238	1240	915
145°	1373	1372	1392	1403	1399	859
155°	1512	1501	1516	1523	1513	697
165°	1593	1586	1590	1598	1590	450
175°	1630	1621	1624	1632	1620	155
180°	1626	1626	1626	1626	1626	

TEST NUMBER: P1029320

CATALOG NUMBER: S122DIW-B290D1240UB2750-4F0-XX-W2A-D_5000K

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°	5.5	43.0	79.6	102.5	110.0
92.5°	33.2	51.1	80.5	99.5	105.8
95°	79.9	61.1	94.8	116.8	120.7
97.5°	140.7	62.5	105.9	125.1	131.4
100°	211.3	65.8	109.6	134.7	141.7
102.5°	288.5	300.2	108.9	137.2	145.4
105°	359.8	407.5	108.4	136.1	145.5
107.5°	443.3	482.9	107.7	135.1	144.5
110°	522.9	556.2	236.9	132.8	142.3

TEST NUMBER: P1029320

CATALOG NUMBER: S122DIW-B290D1240UB2750-4F0-XX-W2A-D_5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	598.2	626.2	625.8	132.3	140.4
115°	678.3	703.0	751.5	219.5	139.4
117.5°	747.3	774.2	812.0	656.6	352.5
120°	824.9	844.3	882.5	908.5	754.3
122.5°	890.8	910.1	949.3	967.8	972.8
125°	957.5	972.8	1008.7	1028.4	1035.8
127.5°	1018.7	1034.7	1063.8	1086.2	1091.2
130°	1076.3	1094.7	1116.6	1139.7	1142.0
132.5°	1135.2	1150.0	1169.3	1189.7	1191.9
135°	1184.1	1202.9	1217.8	1238.5	1239.5
137.5°	1235.9	1250.0	1263.9	1283.7	1283.2
140°	1286.5	1295.5	1309.3	1326.7	1323.3
142.5°	1328.8	1336.6	1351.9	1366.5	1362.7
145°	1373.1	1371.9	1391.9	1402.8	1399.0
147.5°	1411.9	1408.4	1428.4	1434.7	1431.3
150°	1449.6	1441.4	1460.2	1467.3	1461.4
152.5°	1481.4	1472.0	1489.6	1496.7	1488.4
155°	1512.0	1501.4	1515.5	1522.6	1513.1
157.5°	1536.7	1527.3	1537.8	1546.1	1536.7
160°	1557.9	1550.8	1557.9	1564.9	1556.7
162.5°	1576.7	1569.6	1575.5	1583.7	1573.1
165°	1593.1	1586.1	1589.6	1597.9	1589.6
167.5°	1606.1	1599.0	1602.6	1610.8	1600.2
170°	1616.7	1609.6	1612.0	1620.2	1609.6
172.5°	1623.7	1616.7	1619.0	1627.3	1616.7
175°	1629.6	1621.4	1623.7	1632.0	1620.2
177.5°	1632.0	1623.7	1624.9	1633.2	1622.6
180°	1626.1	1626.1	1626.1	1626.1	1626.1

(END OF REPORT)