

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: P1029322

Luminaire Tested: S122DIW-B290D1240UB2750-4F0-XX-W2A-F1_3000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029322
REPORT IS A COMBINATION OF REPORTS P985508 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_3000K
Description: Define 2 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

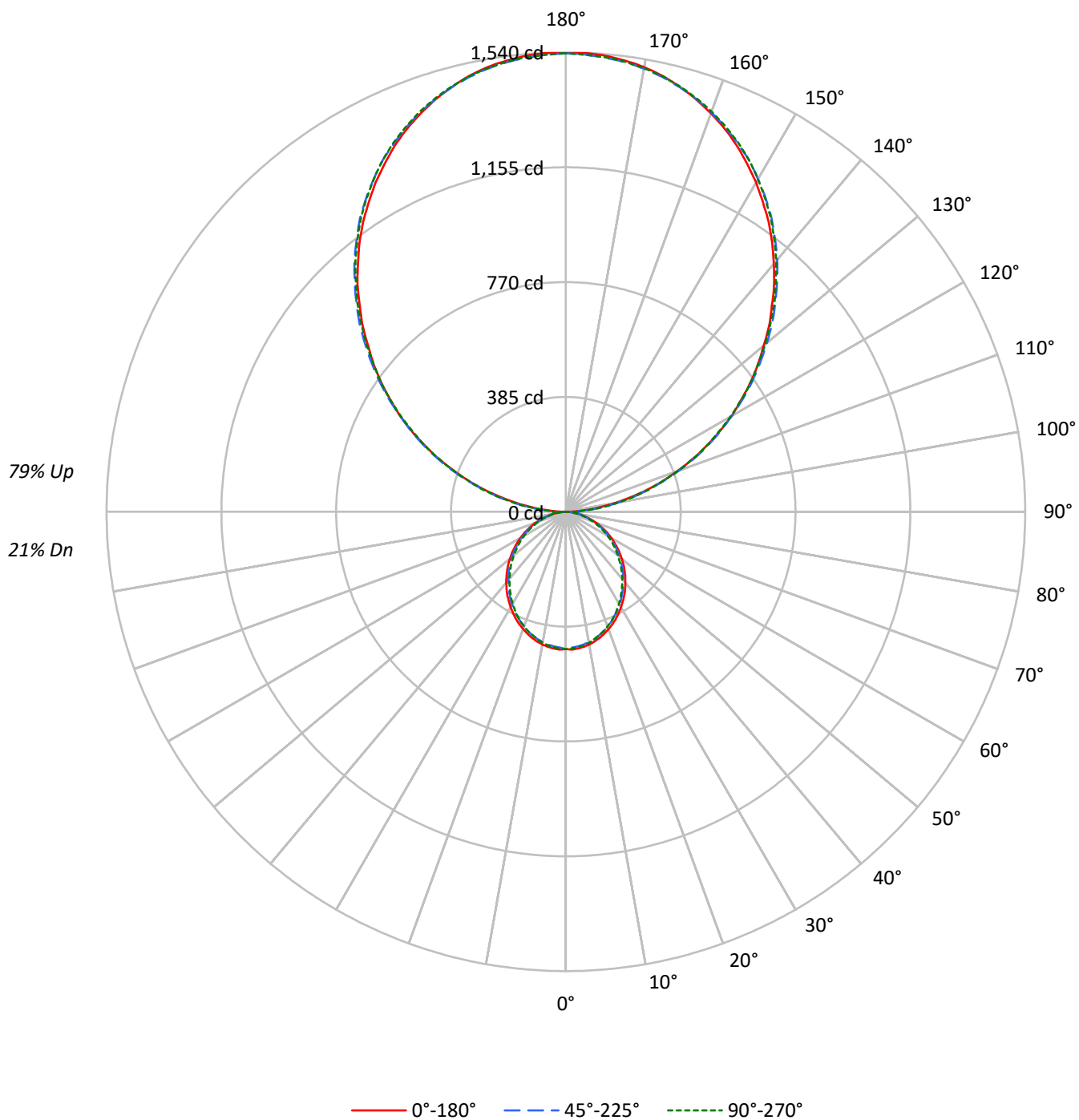
Lumens per Lamp: N/A
Luminaire Lumens: 5472.0 lumens
Efficiency: N/A
Efficacy: 99.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P1029322

CATALOG NUMBER: S122DIW-B290D1240UB2750-4F0-XX-W2A-F1_3000K

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	21		
1	91	87	84	80	81	77	74	72	59	57	55	42	41	40	26	26	25	18		
2	83	76	70	65	73	68	63	59	52	48	46	37	35	33	23	22	21	15		
3	76	67	60	54	67	59	54	49	45	41	38	33	30	28	21	19	18	13		
4	69	59	51	46	61	52	46	41	40	36	32	29	26	24	18	17	15	11		
5	63	52	45	39	56	47	40	35	36	31	28	26	23	21	16	15	13	10		
6	58	47	39	34	51	42	35	30	32	28	24	23	20	18	15	13	12	8		
7	54	42	34	29	47	38	31	26	29	24	21	21	18	16	14	12	10	7		
8	50	38	31	26	44	34	28	23	26	22	18	19	16	14	12	11	9	7		
9	46	34	27	23	41	31	25	20	24	20	16	18	15	12	11	10	8	6		
10	43	31	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8	5		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7280	7280	7280
5°	7292	6938	6890
10°	7232	6622	6491
15°	7127	6304	6072
20°	6983	5958	5675
25°	6840	5595	5278
30°	6661	5255	4863
35°	6491	4896	4455
40°	6282	4542	4069
45°	6074	4191	3690
50°	5847	3833	3296
55°	5609	3451	2925
60°	5341	3037	2537
65°	5044	2618	2132
70°	4673	2156	1721
75°	4156	1663	1328
80°	3529	1131	856
85°	2557	524	364

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6074 cd/sqm

TEST NUMBER: P1029322

CATALOG NUMBER: S122DIW-B290D1240UB2750-4F0-XX-W2A-F1_3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.3	0.8
10°-20°	121.8	2.2
20°-30°	179.0	3.3
30°-40°	207.9	3.8
40°-50°	207.6	3.8
50°-60°	181.0	3.3
60°-70°	133.8	2.4
70°-80°	75.7	1.4
80°-90°	24.4	0.4
90°-100°	95.1	1.7
100°-110°	302.3	5.5
110°-120°	517.3	9.5
120°-130°	680.3	12.4
130°-140°	763.6	14.0
140°-150°	748.8	13.7
150°-160°	628.1	11.5
160°-170°	416.6	7.6
170°-180°	145.6	2.7
0°-30°	344.0	6.3
0°-40°	551.9	10.1
0°-60°	940.5	17.2
0°-90°	1174.4	21.5
90°-120°	914.6	16.7
90°-150°	3107.3	56.8
90°-180°	4298.0	78.5
0°-180°	5472.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	460	460	460	460	460	
5°	460	458	453	457	456	44
15°	438	435	429	431	429	123
25°	396	393	385	386	385	182
35°	342	337	330	328	326	213
45°	278	275	268	264	262	215
55°	210	208	202	197	195	188
65°	142	139	135	131	129	140
75°	74	73	71	68	69	79
85°	18	18	17	16	16	20
90°	1	17	45	43	44	5
95°	68	80	83	83	80	75
105°	279	283	285	288	288	294
115°	519	527	524	523	519	513
125°	755	767	763	759	758	675
135°	977	991	994	992	988	755
145°	1186	1195	1202	1204	1199	741
155°	1356	1360	1363	1370	1366	624
165°	1475	1474	1474	1483	1476	416
175°	1535	1531	1528	1537	1529	146
180°	1537	1537	1537	1537	1537	

TEST NUMBER: P1029322

CATALOG NUMBER: S122DIW-B290D1240UB2750-4F0-XX-W2A-F1_3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	459.9	459.9	459.9	459.9	459.9
2.5°	462.5	460.3	455.5	459.9	459.0
5°	459.9	458.1	453.2	456.8	455.9
7.5°	456.8	454.1	449.3	452.8	451.9
10°	451.9	448.8	443.5	447.1	445.7
12.5°	445.3	442.6	437.3	439.5	438.7
15°	437.8	435.1	429.4	431.1	428.9
17.5°	428.5	425.8	420.1	422.3	420.1
20°	418.3	415.7	409.5	410.8	409.0
22.5°	408.1	404.2	398.4	398.4	397.5
25°	396.2	392.7	385.1	386.0	385.1
27.5°	382.9	379.8	374.1	372.8	370.6
30°	369.7	366.1	359.5	358.2	356.4
32.5°	355.5	352.9	345.8	343.1	341.4
35°	341.8	337.4	330.3	327.7	325.5
37.5°	326.3	322.4	315.3	312.2	310.0
40°	310.4	306.9	299.8	295.8	294.1
42.5°	294.9	291.4	284.3	279.9	277.3
45°	278.1	275.0	268.4	263.5	261.8
47.5°	261.8	258.7	251.6	246.7	244.1
50°	244.5	242.3	236.1	229.9	227.7
52.5°	227.7	224.6	218.9	214.0	210.9
55°	210.5	207.8	202.5	197.2	195.0
57.5°	193.2	191.0	185.3	180.0	178.2
60°	176.0	174.2	168.0	163.2	161.8
62.5°	159.2	156.1	151.7	147.2	145.5
65°	141.9	139.3	134.9	130.9	128.7
67.5°	124.3	122.0	118.1	115.0	113.2
70°	107.9	106.1	102.1	99.1	97.3
72.5°	91.1	89.3	87.1	84.0	82.7
75°	74.3	73.4	71.2	68.5	69.4
77.5°	59.3	57.5	56.6	55.3	53.9
80°	44.2	43.8	42.9	41.6	40.7
82.5°	30.1	30.1	29.6	27.9	27.9
85°	18.1	17.7	17.2	15.9	15.5
87.5°	8.0	7.1	6.2	4.9	4.4
90°	1.3	16.9	45.4	42.8	44.1
92.5°	28.5	38.9	40.2	41.5	41.5
95°	67.5	80.4	83.0	83.0	80.4
97.5°	112.9	124.5	129.7	129.7	129.7
100°	164.7	175.1	179.0	179.0	177.7
102.5°	219.2	227.0	232.2	233.5	232.2
105°	278.9	282.8	285.4	288.0	288.0
107.5°	338.6	343.8	343.8	345.1	338.6
110°	395.6	403.4	403.4	403.4	399.5

TEST NUMBER: P1029322

CATALOG NUMBER: S122DIW-B290D1240UB2750-4F0-XX-W2A-F1_3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	457.9	465.7	464.4	460.5	457.9
115°	518.9	526.7	524.1	522.8	518.9
117.5°	579.8	590.2	583.7	579.8	576.0
120°	640.8	651.2	640.8	640.8	636.9
122.5°	696.6	709.6	703.1	699.2	696.6
125°	755.0	766.6	762.7	758.9	757.6
127.5°	812.0	826.3	821.1	815.9	812.0
130°	865.2	882.1	879.5	876.9	871.7
132.5°	924.9	937.9	939.2	932.7	928.8
135°	976.8	991.1	993.6	992.3	988.5
137.5°	1033.9	1045.5	1048.1	1046.8	1041.6
140°	1084.4	1096.1	1102.6	1102.6	1097.4
142.5°	1136.3	1148.0	1151.9	1153.2	1148.0
145°	1185.6	1194.7	1202.5	1203.8	1198.6
147.5°	1229.7	1241.4	1246.6	1249.2	1244.0
150°	1275.1	1282.9	1288.1	1292.0	1288.1
152.5°	1315.3	1323.1	1329.6	1334.8	1329.6
155°	1355.6	1359.5	1363.3	1369.8	1365.9
157.5°	1390.6	1393.2	1395.8	1404.9	1398.4
160°	1421.7	1424.3	1425.6	1433.4	1428.2
162.5°	1450.3	1450.3	1451.6	1460.6	1454.1
165°	1474.9	1473.6	1473.6	1482.7	1476.2
167.5°	1497.0	1493.1	1493.1	1502.1	1495.7
170°	1513.8	1509.9	1508.6	1517.7	1509.9
172.5°	1525.5	1521.6	1520.3	1529.4	1521.6
175°	1534.6	1530.7	1528.1	1537.2	1529.4
177.5°	1539.8	1535.9	1533.3	1541.1	1533.3
180°	1537.2	1537.2	1537.2	1537.2	1537.2

(END OF REPORT)