

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: P1029447

Luminaire Tested: S122DIW-B290D970UB2750-4F0-XX-W2A-F_5000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029447
REPORT IS A COMBINATION OF REPORTS P985881 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B290D970UB2750-4F0-XX-W2A-F_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

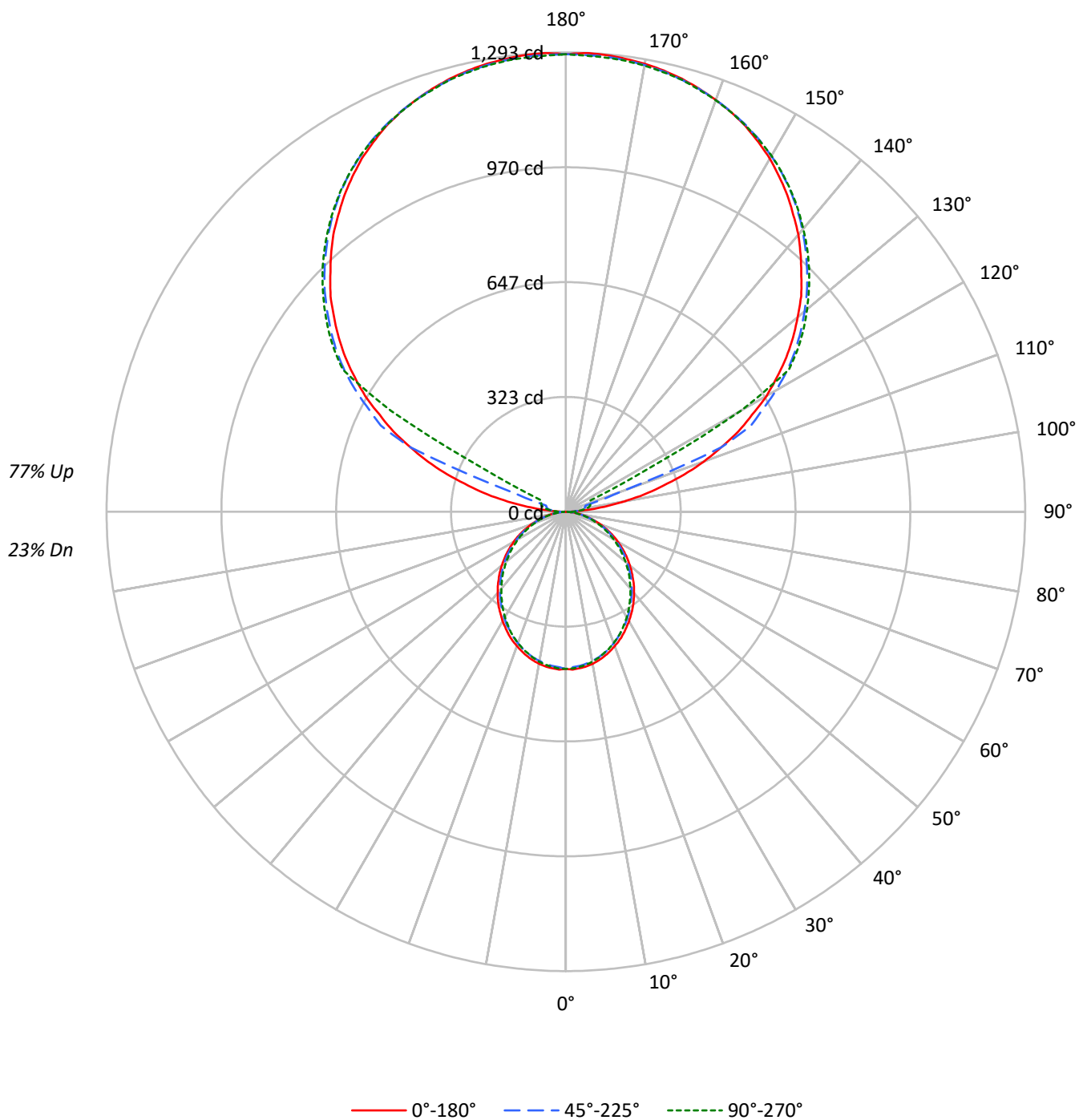
Lumens per Lamp: N/A
Luminaire Lumens: 4903.0 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
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: P1029447

CATALOG NUMBER: S122DIW-B290D970UB2750-4F0-XX-W2A-F_5000K

Luminous Intensity Polar Plot



TEST NUMBER: P1029447

CATALOG NUMBER: S122DIW-B290D970UB2750-4F0-XX-W2A-F_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	50	30	10
RCR																				
0	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31			23
1	92	88	84	80	81	78	75	72	60	58	56	43	42	41	28	27	26			19
2	83	76	71	66	74	68	63	59	52	49	46	38	36	34	24	23	22			16
3	76	67	60	55	67	60	54	49	46	42	39	33	31	29	22	20	19			14
4	70	59	52	46	61	53	46	42	41	36	33	30	27	24	19	18	16			12
5	64	53	45	39	56	47	40	35	36	32	28	26	23	21	17	15	14			10
6	58	47	39	34	52	42	35	31	33	28	24	24	21	18	16	14	12			9
7	54	42	35	29	48	38	31	27	29	25	21	22	18	16	14	12	11			8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	11	10			7
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9			6
10	43	32	25	20	38	28	22	18	22	18	15	17	14	11	11	9	8			6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7000	7000	7000
5°	7011	6672	6625
10°	6953	6368	6242
15°	6852	6062	5838
20°	6714	5728	5457
25°	6578	5380	5075
30°	6405	5054	4676
35°	6243	4708	4283
40°	6041	4368	3911
45°	5840	4030	3548
50°	5622	3686	3170
55°	5393	3318	2812
60°	5134	2922	2440
65°	4852	2517	2049
70°	4491	2074	1654
75°	3994	1600	1279
80°	3393	1086	822
85°	2458	506	350

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5840 cd/sqm

TEST NUMBER: P1029447

CATALOG NUMBER: S122DIW-B290D970UB2750-4F0-XX-W2A-F_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.6	0.8
10°-20°	117.1	2.4
20°-30°	172.1	3.5
30°-40°	199.9	4.1
40°-50°	199.6	4.1
50°-60°	174.1	3.5
60°-70°	128.7	2.6
70°-80°	72.8	1.5
80°-90°	21.5	0.4
90°-100°	42.5	0.9
100°-110°	158.3	3.2
110°-120°	419.9	8.6
120°-130°	696.4	14.2
130°-140°	739.7	15.1
140°-150°	687.5	14.0
150°-160°	552.7	11.3
160°-170°	356.2	7.3
170°-180°	122.6	2.5
0°-30°	330.8	6.7
0°-40°	530.7	10.8
0°-60°	904.3	18.4
0°-90°	1127.3	23.0
90°-120°	620.7	12.7
90°-150°	2744.3	56.0
90°-180°	3776.0	77.0
0°-180°	4903.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	442	442	442	442	442	
5°	442	440	436	439	438	42
15°	421	418	413	415	412	119
25°	381	378	370	371	370	175
35°	329	324	318	315	313	205
45°	267	264	258	253	252	206
55°	202	200	195	190	188	181
65°	136	134	130	126	124	135
75°	71	71	68	66	67	76
85°	17	17	17	15	15	19
90°	1	11	19	23	25	4
95°	61	30	36	41	40	72
105°	283	311	57	67	71	303
115°	536	552	575	144	76	527
125°	758	770	788	794	797	676
135°	938	952	961	970	968	724
145°	1088	1087	1102	1109	1104	680
155°	1198	1189	1200	1206	1198	552
165°	1262	1256	1259	1266	1259	356
175°	1291	1284	1286	1293	1283	123
180°	1288	1288	1288	1288	1288	

TEST NUMBER: P1029447

CATALOG NUMBER: S122DIW-B290D970UB2750-4F0-XX-W2A-F_5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	442.2	442.2	442.2	442.2	442.2
2.5°	444.7	442.6	437.9	442.2	441.3
5°	442.2	440.5	435.8	439.2	438.4
7.5°	439.2	436.7	432.0	435.4	434.5
10°	434.5	431.6	426.5	429.9	428.6
12.5°	428.2	425.6	420.5	422.6	421.8
15°	420.9	418.4	412.9	414.6	412.4
17.5°	412.0	409.5	403.9	406.0	403.9
20°	402.2	399.7	393.7	395.0	393.3
22.5°	392.4	388.6	383.1	383.1	382.2
25°	381.0	377.6	370.3	371.2	370.3
27.5°	368.2	365.2	359.7	358.4	356.3
30°	355.5	352.1	345.7	344.4	342.7
32.5°	341.8	339.3	332.5	329.9	328.2
35°	328.7	324.4	317.6	315.1	312.9
37.5°	313.8	310.0	303.2	300.2	298.1
40°	298.5	295.1	288.3	284.4	282.7
42.5°	283.6	280.2	273.4	269.1	266.6
45°	267.4	264.5	258.1	253.4	251.7
47.5°	251.7	248.7	241.9	237.3	234.7
50°	235.1	233.0	227.0	221.1	219.0
52.5°	219.0	216.0	210.5	205.8	202.8
55°	202.4	199.8	194.7	189.6	187.5
57.5°	185.8	183.7	178.2	173.0	171.3
60°	169.2	167.5	161.6	156.9	155.6
62.5°	153.1	150.1	145.8	141.6	139.9
65°	136.5	133.9	129.7	125.9	123.7
67.5°	119.5	117.4	113.5	110.5	108.8
70°	103.7	102.0	98.2	95.2	93.5
72.5°	87.6	85.9	83.8	80.8	79.5
75°	71.4	70.6	68.5	65.9	66.8
77.5°	57.0	55.3	54.4	53.1	51.9
80°	42.5	42.1	41.2	40.0	39.1
82.5°	28.9	28.9	28.5	26.8	26.8
85°	17.4	17.0	16.6	15.3	14.9
87.5°	7.7	6.8	6.0	4.7	4.3
90°	0.9	11.2	18.6	23.3	25.2
92.5°	23.3	19.6	22.4	24.2	25.2
95°	60.6	29.8	36.3	41.0	40.1
97.5°	109.0	32.6	47.5	50.3	51.3
100°	165.0	37.3	53.1	60.6	62.4
102.5°	226.5	224.6	55.0	65.2	68.0
105°	283.3	311.3	56.8	67.1	70.8
107.5°	349.5	372.8	58.7	69.0	72.7
110°	412.8	432.4	163.1	69.9	73.6

TEST NUMBER: P1029447

CATALOG NUMBER: S122DIW-B290D970UB2750-4F0-XX-W2A-F_5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	472.5	489.3	473.4	71.8	74.6
115°	535.9	551.7	575.0	143.5	76.4
117.5°	590.8	609.5	625.3	492.1	247.9
120°	652.3	666.3	683.1	694.3	568.5
122.5°	704.5	719.4	738.1	743.7	744.6
125°	757.7	769.8	787.5	794.0	796.8
127.5°	806.1	819.2	833.1	842.5	843.4
130°	851.8	866.7	876.9	887.2	886.3
132.5°	898.4	910.5	920.7	929.1	928.2
135°	937.5	952.4	960.8	970.1	968.3
137.5°	978.5	989.7	999.0	1008.3	1005.5
140°	1018.6	1026.1	1036.3	1044.7	1040.0
142.5°	1052.1	1058.7	1070.8	1078.2	1073.6
145°	1087.6	1086.6	1102.5	1109.0	1104.3
147.5°	1118.3	1115.5	1131.4	1136.0	1132.3
150°	1148.1	1141.6	1156.5	1162.1	1157.5
152.5°	1173.3	1165.8	1179.8	1185.4	1178.9
155°	1197.5	1189.1	1200.3	1205.9	1198.5
157.5°	1217.1	1209.6	1218.0	1224.6	1217.1
160°	1233.9	1228.3	1233.9	1239.5	1232.9
162.5°	1248.8	1243.2	1247.8	1254.4	1246.0
165°	1261.8	1256.2	1259.0	1265.6	1259.0
167.5°	1272.1	1266.5	1269.3	1275.8	1267.4
170°	1280.5	1274.9	1276.7	1283.3	1274.9
172.5°	1286.1	1280.5	1282.3	1288.9	1280.5
175°	1290.7	1284.2	1286.1	1292.6	1283.3
177.5°	1292.6	1286.1	1287.0	1293.5	1285.1
180°	1287.9	1287.9	1287.9	1287.9	1287.9

(END OF REPORT)