

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: P1029443

Luminaire Tested: S122DIW-B290D970UB2750-4F0-XX-W2A-F1_5000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029443
REPORT IS A COMBINATION OF REPORTS P985871 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-F1_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

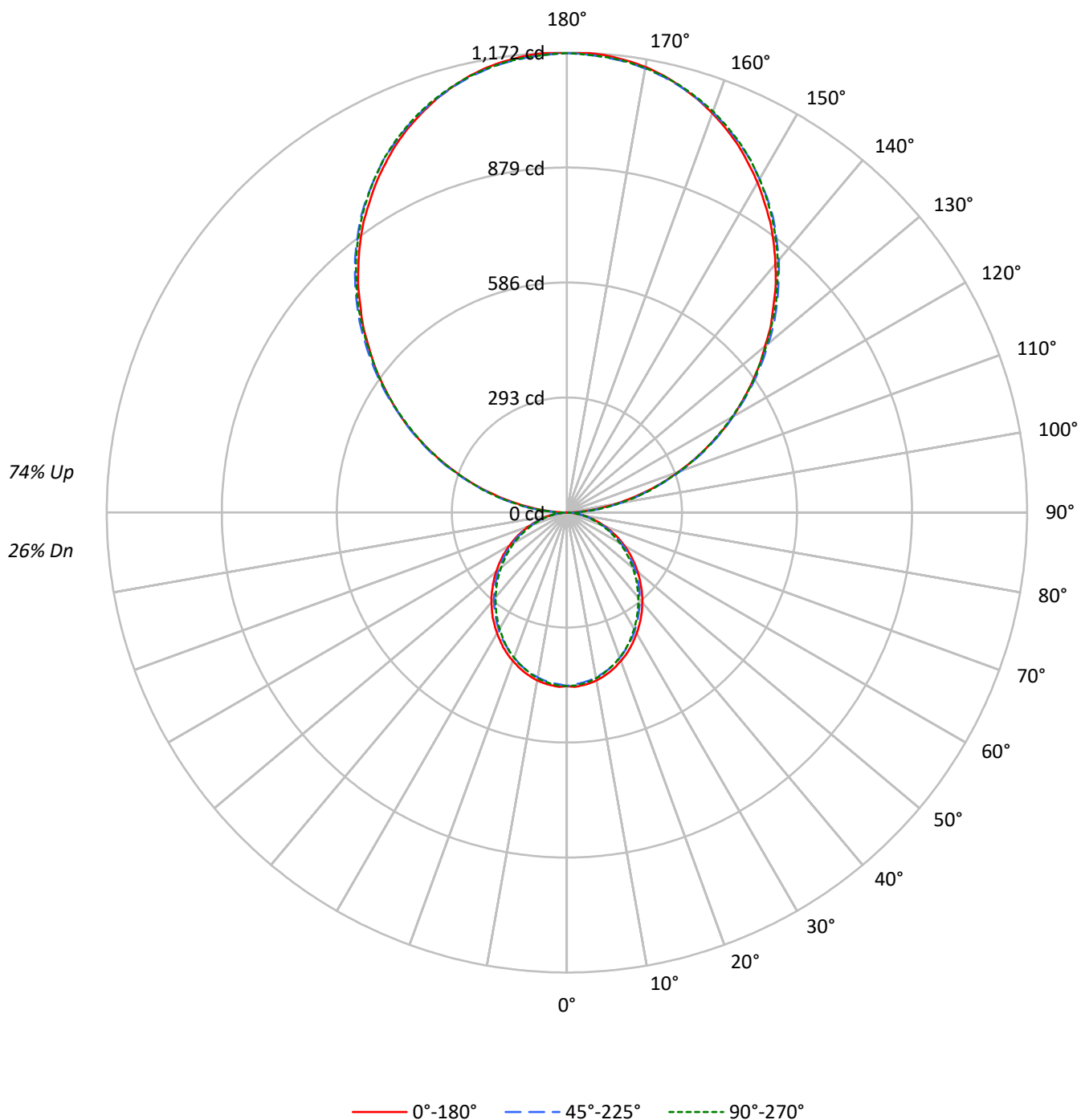
Lumens per Lamp: N/A
Luminaire Lumens: 4401.0 lumens
Efficiency: N/A
Efficacy: 98.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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
RCR																	
0	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34
1	92	88	84	81	82	79	76	73	61	59	57	45	43	42	30	29	28
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24
3	77	68	61	55	68	60	55	50	47	43	40	35	32	30	23	22	20
4	70	60	52	46	62	53	47	42	42	37	34	31	28	25	21	19	17
5	64	53	45	39	57	48	41	36	37	32	29	28	24	22	19	17	15
6	59	47	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13
7	54	43	35	30	48	38	32	27	30	25	22	23	19	17	15	13	12
8	50	39	31	26	45	35	28	24	27	23	19	21	17	15	14	12	11
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10
10	44	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	9

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.6	0.9
10°-20°	117.1	2.7
20°-30°	172.1	3.9
30°-40°	199.9	4.5
40°-50°	199.6	4.5
50°-60°	174.1	4.0
60°-70°	128.7	2.9
70°-80°	72.8	1.7
80°-90°	22.6	0.5
90°-100°	72.4	1.6
100°-110°	230.2	5.2
110°-120°	393.9	9.0
120°-130°	518.0	11.8
130°-140°	581.5	13.2
140°-150°	570.2	13.0
150°-160°	478.3	10.9
160°-170°	317.2	7.2
170°-180°	110.9	2.5
0°-30°	330.8	7.5
0°-40°	530.7	12.1
0°-60°	904.3	20.5
0°-90°	1128.3	25.6
90°-120°	696.5	15.8
90°-150°	2366.2	53.8
90°-180°	3273.0	74.4
0°-180°	4401.0	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	13	35	33	34	4
95°	51	61	63	63	61	57
105°	212	215	217	219	219	224
115°	395	401	399	398	395	391
125°	575	584	581	578	577	514
135°	744	755	757	756	753	575
145°	903	910	916	917	913	564
155°	1032	1035	1038	1043	1040	475
165°	1123	1122	1122	1129	1124	317
175°	1169	1166	1164	1171	1165	111
180°	1171	1171	1171	1171	1171	

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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°	1.0	12.8	34.6	32.6	33.6
92.5°	21.7	29.6	30.6	31.6	31.6
95°	51.4	61.2	63.2	63.2	61.2
97.5°	85.9	94.8	98.8	98.8	98.8
100°	125.5	133.4	136.3	136.3	135.3
102.5°	166.9	172.9	176.8	177.8	176.8
105°	212.4	215.3	217.3	219.3	219.3
107.5°	257.8	261.8	261.8	262.8	257.8
110°	301.3	307.2	307.2	307.2	304.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	348.7	354.6	353.6	350.7	348.7
115°	395.1	401.1	399.1	398.1	395.1
117.5°	441.6	449.5	444.5	441.6	438.6
120°	488.0	495.9	488.0	488.0	485.0
122.5°	530.5	540.3	535.4	532.4	530.5
125°	574.9	583.8	580.8	577.9	576.9
127.5°	618.4	629.2	625.3	621.3	618.4
130°	658.9	671.7	669.7	667.8	663.8
132.5°	704.3	714.2	715.2	710.2	707.3
135°	743.8	754.7	756.7	755.7	752.7
137.5°	787.3	796.2	798.2	797.2	793.2
140°	825.8	834.7	839.6	839.6	835.7
142.5°	865.3	874.2	877.2	878.2	874.2
145°	902.9	909.8	915.7	916.7	912.7
147.5°	936.4	945.3	949.3	951.3	947.3
150°	971.0	976.9	980.9	983.9	980.9
152.5°	1001.6	1007.6	1012.5	1016.5	1012.5
155°	1032.3	1035.2	1038.2	1043.1	1040.2
157.5°	1058.9	1060.9	1062.9	1069.8	1064.9
160°	1082.6	1084.6	1085.6	1091.5	1087.6
162.5°	1104.4	1104.4	1105.4	1112.3	1107.3
165°	1123.1	1122.2	1122.2	1129.1	1124.1
167.5°	1139.9	1137.0	1137.0	1143.9	1139.0
170°	1152.8	1149.8	1148.8	1155.7	1149.8
172.5°	1161.7	1158.7	1157.7	1164.6	1158.7
175°	1168.6	1165.6	1163.6	1170.6	1164.6
177.5°	1172.5	1169.6	1167.6	1173.5	1167.6
180°	1170.6	1170.6	1170.6	1170.6	1170.6

(END OF REPORT)