

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: P1029431

Luminaire Tested: S122DIW-B290D970UB2750-4F0-XX-W2A-D1_3000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029431
REPORT IS A COMBINATION OF REPORTS P985853 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-D1_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

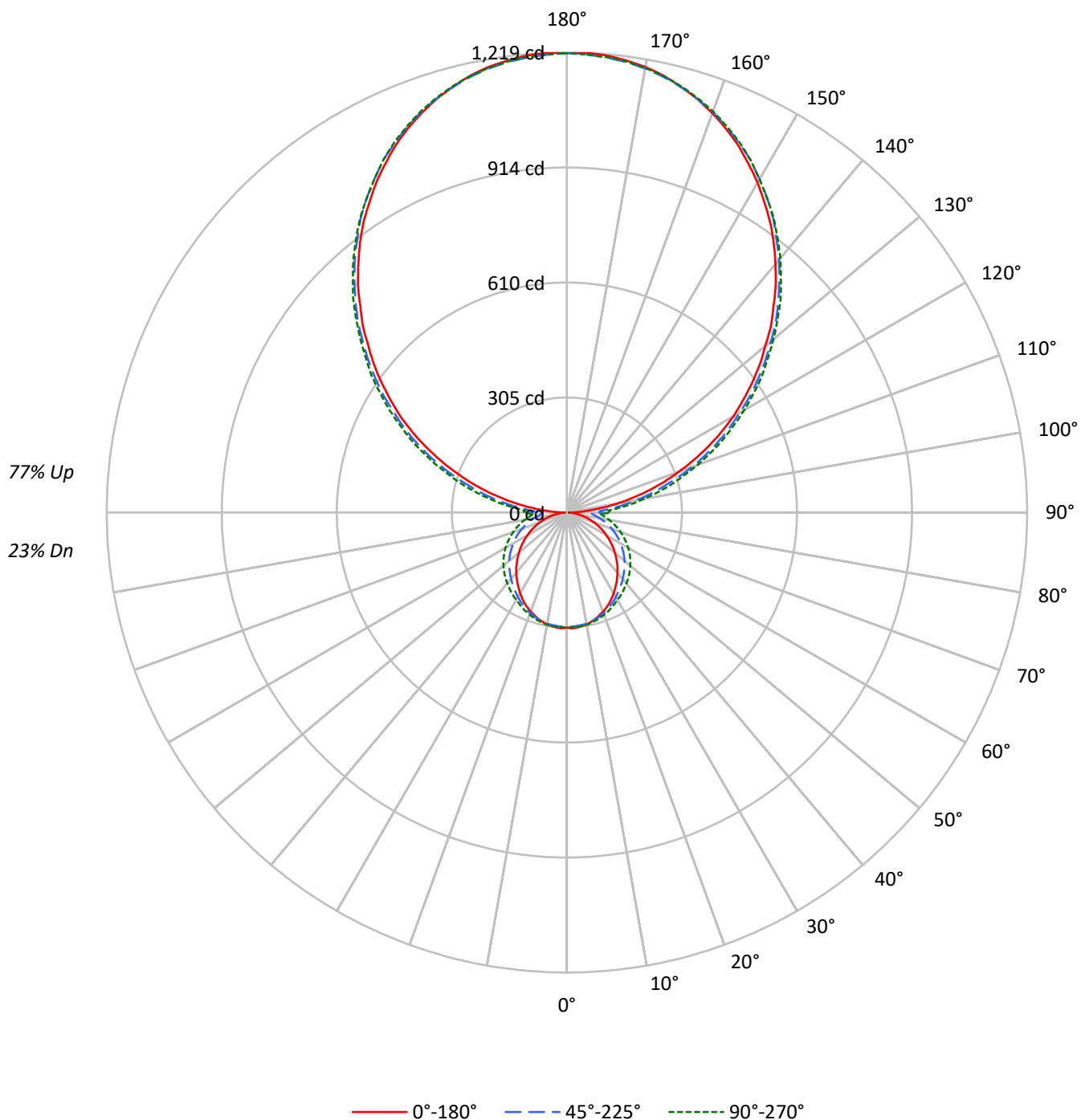
Lumens per Lamp: N/A
Luminaire Lumens: 4570.9 lumens
Efficiency: N/A
Efficacy: 102.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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	50	30	10
RCR																				
0	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31			23
1	91	87	83	79	80	77	73	70	59	56	54	42	40	39	26	25	25			18
2	83	75	69	64	73	67	62	57	51	47	44	36	34	32	23	21	20			14
3	75	66	58	53	66	58	52	47	45	40	37	32	29	27	20	18	17			12
4	68	58	50	44	60	51	45	40	39	35	31	28	25	23	18	16	14			10
5	63	51	43	37	55	46	39	34	35	30	26	25	22	19	16	14	12			8
6	57	46	38	32	51	41	34	29	31	26	23	22	19	17	14	12	11			7
7	53	41	33	28	47	37	30	25	28	23	20	20	17	15	13	11	9			6
8	49	37	30	24	43	33	27	22	26	21	17	18	15	13	12	10	8			6
9	45	34	26	21	40	30	24	19	23	19	15	17	14	11	11	9	8			5
10	42	31	24	19	37	27	21	17	21	17	14	16	12	10	10	8	7			5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4830	4830	4830
5°	4850	4623	4597
10°	4818	4463	4398
15°	4750	4297	4193
20°	4664	4123	4000
25°	4580	3956	3824
30°	4461	3788	3650
35°	4341	3624	3522
40°	4214	3483	3395
45°	4095	3356	3284
50°	3965	3237	3175
55°	3829	3112	3064
60°	3663	2981	2947
65°	3487	2832	2812
70°	3291	2670	2668
75°	3043	2509	2530
80°	2651	2343	2388
85°	2246	2183	2267

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4095 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.9	0.6
10°-20°	82.9	1.8
20°-30°	125.7	2.7
30°-40°	153.0	3.3
40°-50°	164.7	3.6
50°-60°	159.9	3.5
60°-70°	139.6	3.1
70°-80°	107.5	2.4
80°-90°	75.4	1.7
90°-100°	124.9	2.7
100°-110°	275.7	6.0
110°-120°	433.6	9.5
120°-130°	552.1	12.1
130°-140°	610.3	13.4
140°-150°	594.0	13.0
150°-160°	497.4	10.9
160°-170°	329.9	7.2
170°-180°	115.3	2.5
0°-30°	237.5	5.2
0°-40°	390.6	8.5
0°-60°	715.1	15.6
0°-90°	1037.7	22.7
90°-120°	834.2	18.2
90°-150°	2590.6	56.7
90°-180°	3533.0	77.3
0°-180°	4570.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	305	305	305	305	305	
5°	306	305	302	305	304	29
15°	292	293	293	297	296	82
25°	265	268	272	278	279	122
35°	229	236	244	254	257	143
45°	188	199	215	229	233	145
55°	144	160	183	198	204	129
65°	98	120	146	164	170	98
75°	54	79	107	126	132	58
85°	16	43	72	90	96	17
90°	5	44	94	110	116	6
95°	57	88	116	133	137	62
105°	223	239	264	282	286	236
115°	413	424	442	454	456	408
125°	599	608	619	628	631	535
135°	774	785	792	800	800	598
145°	939	946	952	956	954	587
155°	1074	1077	1080	1085	1082	494
165°	1168	1167	1167	1174	1169	329
175°	1215	1212	1210	1217	1211	115
180°	1217	1217	1217	1217	1217	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	305.1	305.1	305.1	305.1	305.1
2.5°	307.3	305.9	302.8	305.1	304.2
5°	305.9	304.6	302.0	304.6	304.2
7.5°	303.7	302.8	300.6	303.7	303.3
10°	301.1	300.2	298.9	302.4	302.0
12.5°	296.7	297.1	296.2	299.8	299.3
15°	291.8	292.7	292.7	296.7	296.2
17.5°	285.6	287.4	288.7	292.7	292.7
20°	279.4	281.6	283.4	288.3	288.3
22.5°	272.8	275.4	278.1	283.0	283.8
25°	265.3	268.4	272.3	277.6	279.0
27.5°	256.4	261.3	265.7	272.3	273.2
30°	247.6	253.3	259.1	266.2	267.5
32.5°	237.9	244.5	251.6	260.0	262.6
35°	228.6	236.1	244.5	254.2	257.3
37.5°	218.4	226.8	237.4	248.0	251.1
40°	208.2	218.0	229.9	241.4	245.4
42.5°	198.5	208.2	222.4	235.2	239.2
45°	187.5	199.4	214.9	228.6	233.0
47.5°	176.8	189.7	207.4	221.5	226.4
50°	165.8	179.5	199.4	214.4	219.3
52.5°	155.2	169.8	191.0	206.5	211.8
55°	143.7	159.6	182.6	198.5	204.3
57.5°	132.6	150.3	173.3	190.6	196.3
60°	120.7	139.7	164.9	181.7	187.9
62.5°	110.1	130.0	155.2	173.3	179.1
65°	98.1	119.8	145.9	164.0	169.8
67.5°	87.5	110.1	136.6	154.7	160.9
70°	76.0	99.0	126.4	145.5	150.8
72.5°	65.4	89.3	117.2	135.7	142.4
75°	54.4	79.1	107.4	126.4	132.2
77.5°	43.8	69.4	98.1	117.2	123.4
80°	33.2	60.1	88.9	107.4	113.6
82.5°	24.3	50.8	80.0	98.6	104.3
85°	15.9	43.3	71.6	90.2	96.4
87.5°	9.7	36.3	64.5	82.7	88.4
90°	5.4	43.5	94.4	109.9	116.2
92.5°	26.6	58.2	86.2	104.5	109.8
95°	56.9	88.0	116.5	133.3	136.6
97.5°	92.5	120.7	150.4	166.8	172.1
100°	133.6	158.2	186.0	202.4	206.1
102.5°	176.3	197.0	225.0	241.9	245.8
105°	223.1	239.0	264.0	281.6	286.5
107.5°	270.3	285.0	307.1	323.3	322.9
110°	315.1	330.1	351.8	365.9	367.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	364.4	377.6	397.0	408.0	410.8
115°	412.7	423.7	441.5	453.8	455.6
117.5°	460.5	472.3	485.7	495.9	497.2
120°	508.8	518.8	528.3	540.7	542.4
122.5°	553.0	563.7	574.9	583.8	585.7
125°	598.8	608.0	619.1	628.0	630.9
127.5°	644.0	654.8	662.7	669.6	670.5
130°	686.1	699.0	706.2	714.8	714.3
132.5°	733.4	743.1	750.9	755.8	756.4
135°	774.0	785.3	791.8	800.0	800.5
137.5°	819.2	828.4	832.8	840.1	839.0
140°	859.2	868.1	874.1	881.2	879.7
142.5°	900.3	909.2	912.3	918.6	916.7
145°	939.0	946.2	952.3	956.0	954.1
147.5°	973.9	983.1	987.3	989.7	987.0
150°	1009.9	1016.0	1020.1	1023.2	1020.1
152.5°	1041.7	1047.9	1053.0	1057.1	1053.0
155°	1073.5	1076.6	1079.7	1084.8	1081.8
157.5°	1101.3	1103.3	1105.4	1112.6	1107.4
160°	1125.9	1128.0	1129.0	1135.2	1131.1
162.5°	1148.5	1148.5	1149.6	1156.8	1151.6
165°	1168.1	1167.0	1167.0	1174.2	1169.1
167.5°	1185.5	1182.4	1182.4	1189.6	1184.5
170°	1198.9	1195.8	1194.8	1202.0	1195.8
172.5°	1208.1	1205.0	1204.0	1211.2	1205.0
175°	1215.3	1212.2	1210.2	1217.4	1211.2
177.5°	1219.4	1216.3	1214.3	1220.5	1214.3
180°	1217.4	1217.4	1217.4	1217.4	1217.4

(END OF REPORT)