

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: P1029434

Luminaire Tested: S122DIW-B290D970UB2750-4F0-XX-W2A-D1_5000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029434
REPORT IS A COMBINATION OF REPORTS P985856 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_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

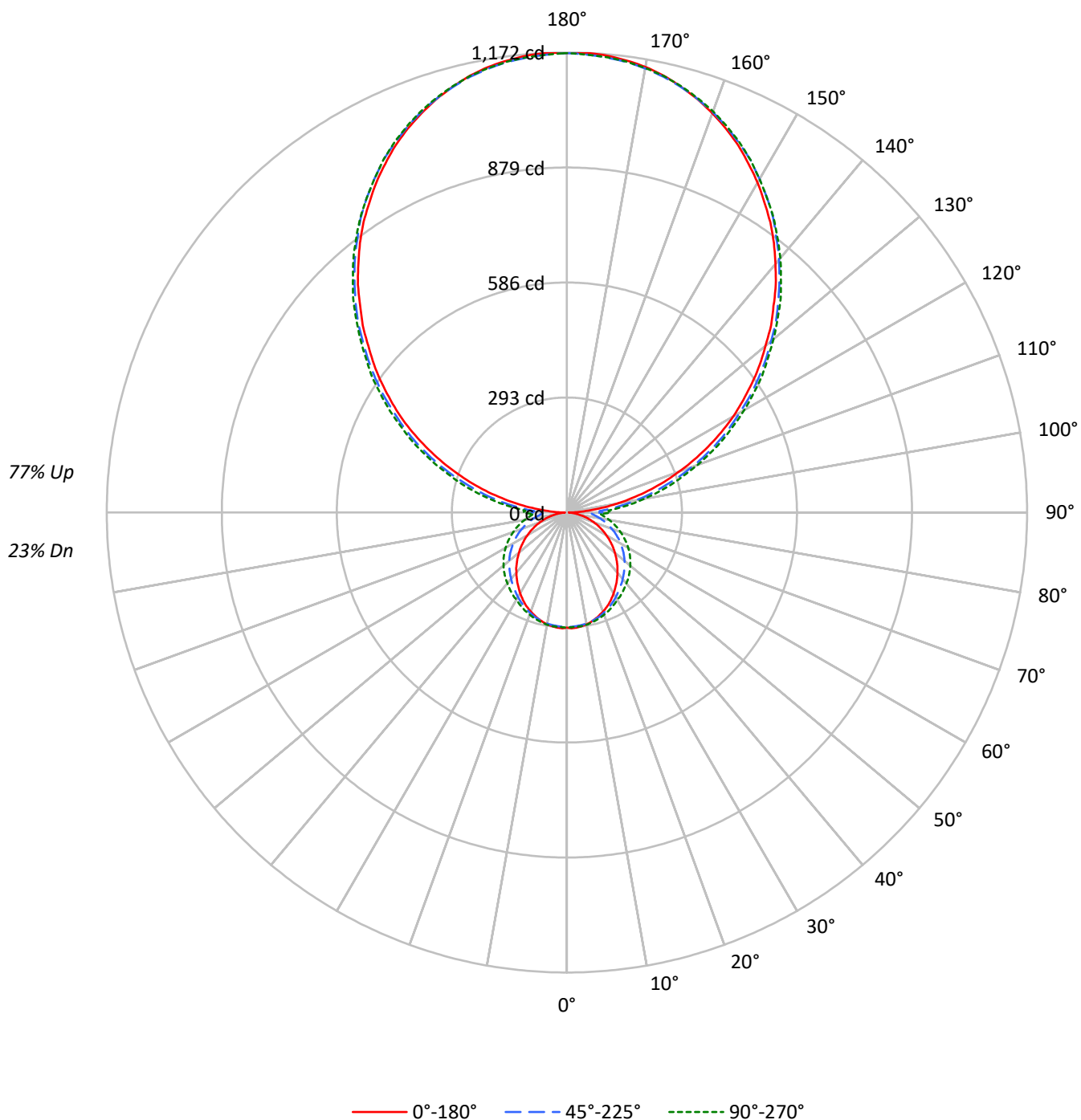
Lumens per Lamp: N/A
Luminaire Lumens: 4395.0 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.8	0.6
10°-20°	79.7	1.8
20°-30°	120.8	2.7
30°-40°	147.1	3.3
40°-50°	158.3	3.6
50°-60°	153.7	3.5
60°-70°	134.3	3.1
70°-80°	103.3	2.4
80°-90°	72.6	1.7
90°-100°	120.1	2.7
100°-110°	265.1	6.0
110°-120°	416.9	9.5
120°-130°	530.9	12.1
130°-140°	586.9	13.4
140°-150°	571.1	13.0
150°-160°	478.3	10.9
160°-170°	317.2	7.2
170°-180°	110.9	2.5
0°-30°	228.3	5.2
0°-40°	375.5	8.5
0°-60°	687.5	15.6
0°-90°	997.6	22.7
90°-120°	802.1	18.3
90°-150°	2491.0	56.7
90°-180°	3397.0	77.3
0°-180°	4395.0	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°	5	42	91	106	112	6
95°	55	85	112	128	131	60
105°	214	230	254	271	275	227
115°	397	408	425	436	438	392
125°	576	585	595	604	607	515
135°	744	755	761	769	770	575
145°	903	910	916	919	917	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°	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°	5.3	41.7	90.7	105.7	111.8
92.5°	25.5	56.0	82.9	100.5	105.6
95°	54.8	84.6	112.1	128.2	131.3
97.5°	88.9	116.1	144.7	160.4	165.5
100°	128.5	152.1	178.8	194.5	198.2
102.5°	169.5	189.5	216.3	232.6	236.3
105°	214.5	229.8	253.9	270.7	275.4
107.5°	259.9	274.1	295.4	310.8	310.5
110°	303.0	317.4	338.2	351.8	353.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	350.4	363.1	381.7	392.4	395.0
115°	396.8	407.5	424.6	436.4	438.0
117.5°	442.9	454.2	467.0	476.9	478.1
120°	489.3	498.9	508.0	519.9	521.6
122.5°	531.8	542.0	552.8	561.3	563.2
125°	575.8	584.7	595.3	603.8	606.7
127.5°	619.3	629.6	637.2	643.8	644.8
130°	659.8	672.1	679.1	687.4	686.8
132.5°	705.2	714.6	722.0	726.8	727.3
135°	744.2	755.1	761.4	769.3	769.7
137.5°	787.7	796.6	800.8	807.8	806.8
140°	826.2	834.7	840.5	847.3	845.9
142.5°	865.7	874.2	877.2	883.3	881.4
145°	902.9	909.8	915.7	919.3	917.4
147.5°	936.4	945.3	949.3	951.7	949.0
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)