

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: P1029228

Luminaire Tested: S122DIW-B1005D435UB2750-4F0-XX-W2A-D1_5000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029228
REPORT IS A COMBINATION OF REPORTS P985226 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B1005D435UB2750-4F0-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

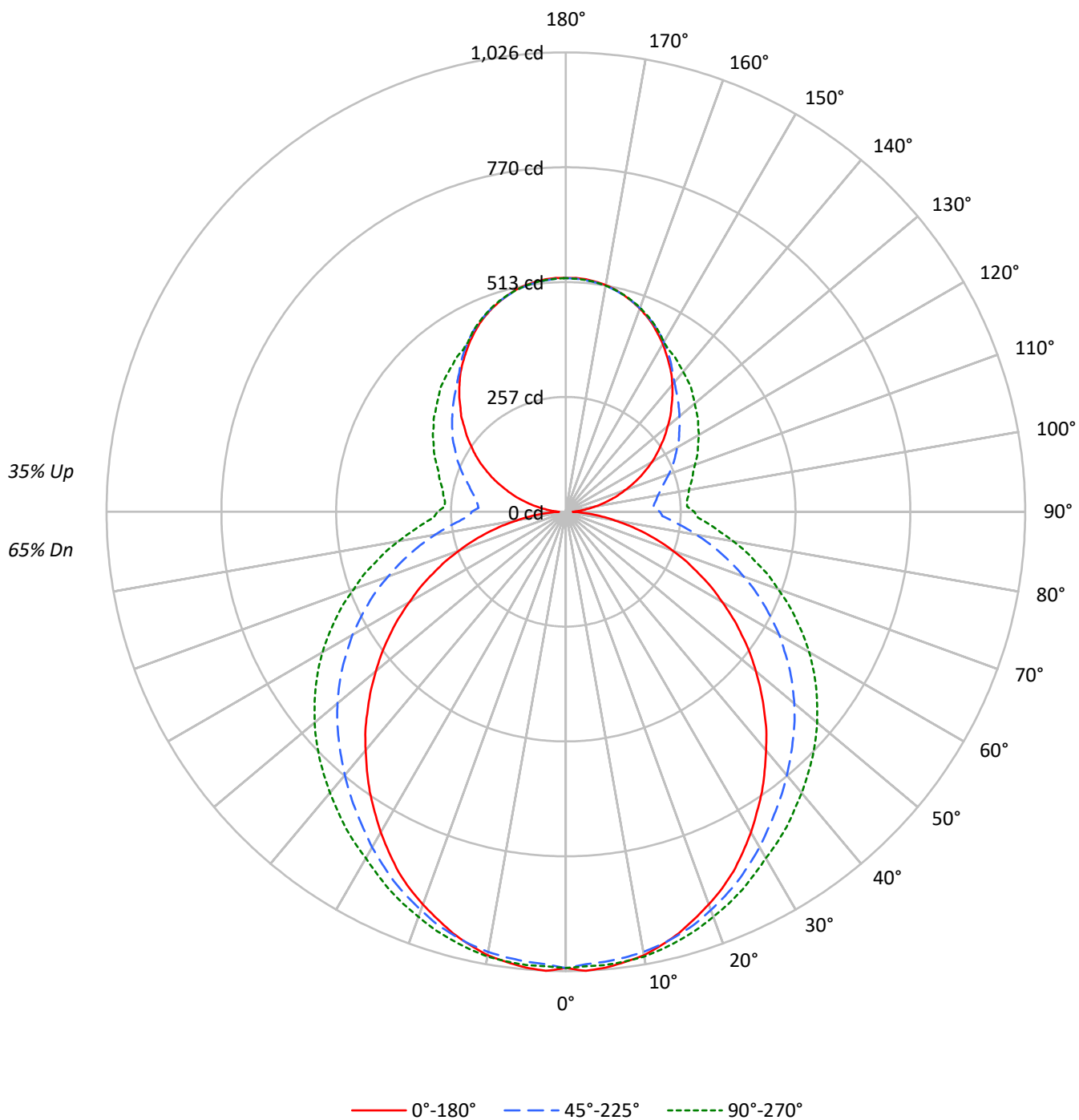
Lumens per Lamp: N/A
Luminaire Lumens: 5349.0 lumens
Efficiency: N/A
Efficacy: 71.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.5
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: P1029228

CATALOG NUMBER: S122DIW-B1005D435UB2750-4F0-XX-W2A-D1_5000K

Luminous Intensity Polar Plot



TEST NUMBER: P1029228

CATALOG NUMBER: S122DIW-B1005D435UB2750-4F0-XX-W2A-D1_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
RCR																	
0	111	111	111	111	104	104	104	104	91	91	91		80	80	80		70
1	99	94	89	85	93	88	84	80	77	74	71		68	65	63		58
2	89	81	74	68	84	76	70	64	67	62	57		58	54	51		50
3	81	70	62	56	76	66	59	53	58	52	47		51	46	42		44
4	74	62	53	47	69	58	50	44	51	45	40		45	40	36		39
5	68	55	46	40	63	52	44	38	46	39	34		40	35	31		35
6	62	49	41	34	58	47	39	33	41	35	30		36	31	27		32
7	58	44	36	30	54	42	34	29	37	31	26		33	27	23		29
8	54	40	32	26	50	38	31	25	34	28	23		30	25	21		26
9	50	37	29	23	47	35	28	23	31	25	21		28	22	19		24
10	47	34	26	21	44	32	25	20	29	23	19		26	20	17		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16130	16130	16130
5°	16202	15441	15354
10°	16094	14906	14688
15°	15867	14353	14006
20°	15580	13772	13358
25°	15298	13216	12771
30°	14901	12651	12190
35°	14500	12105	11764
40°	14078	11634	11339
45°	13674	11207	10970
50°	13243	10813	10604
55°	12787	10395	10233
60°	12235	9958	9842
65°	11653	9457	9392
70°	11000	8921	8909
75°	10159	8383	8452
80°	8846	7821	7978
85°	7515	7294	7570

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13674 cd/sqm

TEST NUMBER: P1029228

CATALOG NUMBER: S122DIW-B1005D435UB2750-4F0-XX-W2A-D1_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.6	1.8
10°-20°	277.0	5.2
20°-30°	419.8	7.8
30°-40°	511.2	9.6
40°-50°	550.0	10.3
50°-60°	534.1	10.0
60°-70°	466.4	8.7
70°-80°	359.0	6.7
80°-90°	241.9	4.5
90°-100°	198.2	3.7
100°-110°	223.8	4.2
110°-120°	255.6	4.8
120°-130°	275.6	5.2
130°-140°	278.0	5.2
140°-150°	257.5	4.8
150°-160°	213.3	4.0
160°-170°	141.5	2.6
170°-180°	49.4	0.9
0°-30°	793.4	14.8
0°-40°	1304.6	24.4
0°-60°	2388.7	44.7
0°-90°	3456.1	64.6
90°-120°	677.6	12.7
90°-150°	1488.7	27.8
90°-180°	1893.0	35.4
0°-180°	5349.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1019	1019	1019	1019	1019	
5°	1022	1018	1009	1018	1016	97
15°	975	978	978	991	989	275
25°	886	896	910	927	932	407
35°	764	789	817	849	860	477
45°	626	666	718	764	778	483
55°	480	533	610	663	682	429
65°	328	400	487	548	567	326
75°	182	264	359	422	442	192
85°	53	145	239	301	322	56
90°	15	106	210	268	287	12
95°	35	108	198	254	271	35
105°	102	146	224	276	293	108
115°	182	201	267	310	325	180
125°	259	263	309	348	361	232
135°	333	338	354	384	395	258
145°	403	406	408	418	423	252
155°	460	462	463	465	464	212
165°	501	500	500	504	501	141
175°	521	520	519	522	519	50
180°	522	522	522	522	522	

TEST NUMBER: P1029228

CATALOG NUMBER: S122DIW-B1005D435UB2750-4F0-XX-W2A-D1_5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1019.0	1019.0	1019.0	1019.0	1019.0
2.5°	1026.3	1021.9	1011.6	1019.0	1016.0
5°	1021.9	1017.5	1008.6	1017.5	1016.0
7.5°	1014.5	1011.6	1004.2	1014.5	1013.1
10°	1005.7	1002.7	998.3	1010.1	1008.6
12.5°	990.9	992.4	989.4	1001.2	999.8
15°	974.7	977.6	977.6	990.9	989.4
17.5°	954.0	959.9	964.3	977.6	977.6
20°	933.3	940.7	946.6	962.8	962.8
22.5°	911.2	920.0	928.9	945.1	948.1
25°	886.1	896.4	909.7	927.4	931.8
27.5°	856.5	872.8	887.5	909.7	912.6
30°	827.0	846.2	865.4	889.0	893.4
32.5°	794.5	816.6	840.3	868.3	877.2
35°	763.5	788.6	816.6	849.1	859.5
37.5°	729.5	757.6	793.0	828.5	838.8
40°	695.6	728.0	767.9	806.3	819.6
42.5°	663.1	695.6	742.8	785.6	798.9
45°	626.1	666.0	717.7	763.5	778.3
47.5°	590.7	633.5	692.6	739.9	756.1
50°	553.8	599.6	666.0	716.2	732.5
52.5°	518.3	567.1	638.0	689.6	707.4
55°	479.9	533.1	609.9	663.1	682.3
57.5°	443.0	502.1	578.9	636.5	655.7
60°	403.2	466.7	550.8	606.9	627.6
62.5°	367.7	434.2	518.3	578.9	598.1
65°	327.8	400.2	487.3	547.9	567.1
67.5°	292.4	367.7	456.3	516.9	537.5
70°	254.0	330.8	422.4	485.9	503.6
72.5°	218.6	298.3	391.3	453.4	475.5
75°	181.6	264.3	358.9	422.4	441.6
77.5°	146.2	231.9	327.8	391.3	412.0
80°	110.8	200.8	296.8	358.9	379.5
82.5°	81.2	169.8	267.3	329.3	348.5
85°	53.2	144.7	239.2	301.3	321.9
87.5°	32.5	121.1	215.6	276.2	295.4
90°	15.2	106.1	210.3	268.5	286.7
92.5°	23.0	104.8	195.3	253.3	271.1
95°	34.7	108.5	198.0	254.1	271.0
97.5°	48.6	116.1	203.6	258.2	276.0
100°	66.2	124.5	208.5	263.1	279.0
102.5°	83.4	134.7	216.2	269.8	285.6
105°	102.1	146.2	223.9	276.5	292.7
107.5°	122.4	159.5	233.4	284.1	298.1
110°	140.3	172.4	244.8	292.1	307.0

TEST NUMBER: P1029228

CATALOG NUMBER: S122DIW-B1005D435UB2750-4F0-XX-W2A-D1_5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	161.4	187.7	255.2	301.1	316.5
115°	182.1	201.1	266.6	310.4	325.4
117.5°	201.3	216.6	276.5	319.5	332.9
120°	222.0	231.4	287.0	328.4	343.3
122.5°	241.0	246.9	299.3	337.8	350.3
125°	259.4	263.4	309.2	347.8	360.7
127.5°	278.8	282.1	320.2	355.4	367.4
130°	296.8	301.1	331.2	365.7	375.7
132.5°	317.1	320.0	342.5	374.3	384.8
135°	333.2	338.1	353.7	384.3	394.8
137.5°	352.6	356.6	364.9	392.4	401.1
140°	369.8	372.3	377.5	401.1	408.1
142.5°	387.4	389.9	391.2	409.3	415.0
145°	402.7	405.7	408.4	417.7	423.3
147.5°	417.6	421.6	423.4	425.7	428.4
150°	433.0	435.7	437.5	438.8	437.5
152.5°	446.7	449.3	451.6	453.3	451.6
155°	460.4	461.7	463.0	465.2	463.9
157.5°	472.3	473.1	474.0	477.1	474.9
160°	482.8	483.7	484.2	486.8	485.0
162.5°	492.5	492.5	493.0	496.0	493.8
165°	500.9	500.4	500.4	503.5	501.3
167.5°	508.4	507.1	507.1	510.1	507.9
170°	514.1	512.8	512.3	515.4	512.8
172.5°	518.1	516.7	516.3	519.4	516.7
175°	521.2	519.8	519.0	522.0	519.4
177.5°	522.9	521.6	520.7	523.4	520.7
180°	522.0	522.0	522.0	522.0	522.0

(END OF REPORT)