

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: P1029227

Luminaire Tested: S122DIW-B1005D435UB2750-4F0-XX-W2A-D1_4000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029227
REPORT IS A COMBINATION OF REPORTS P985225 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_4000K
Description: Define 2 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

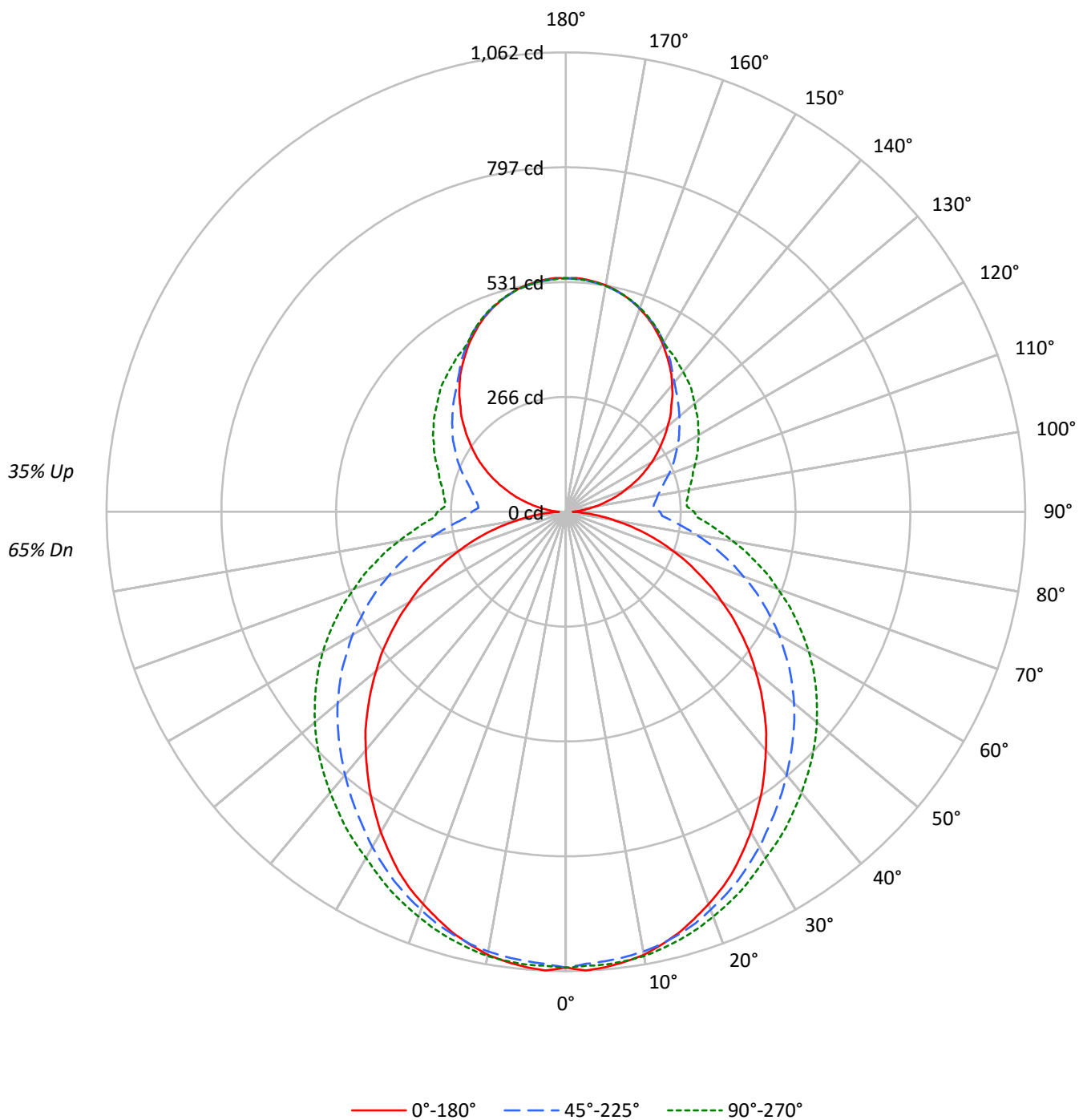
Lumens per Lamp: N/A
Luminaire Lumens: 5532.0 lumens
Efficiency: N/A
Efficacy: 74.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

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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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	70	70	70
1	99	94	89	85	93	88	84	80	77	74	71	68	65	63	58	57	55
2	89	81	74	68	84	76	70	64	67	62	57	58	54	51	50	47	45
3	81	70	62	56	76	66	59	53	58	52	47	51	46	42	44	40	37
4	74	62	53	47	69	58	50	44	51	45	40	45	40	36	39	35	32
5	68	55	46	40	63	52	44	38	46	39	34	40	35	31	35	31	27
6	62	49	41	34	58	47	39	33	41	35	30	36	31	27	32	27	24
7	58	44	36	30	54	42	34	29	37	31	26	33	27	23	29	24	21
8	54	40	32	26	50	38	31	25	34	28	23	30	25	21	26	22	19
9	50	37	29	23	47	35	28	23	31	25	21	28	22	19	24	20	17
10	47	34	26	21	44	32	25	20	29	23	19	26	20	17	23	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16681	16681	16681
5°	16757	15969	15880
10°	16645	15416	15191
15°	16409	14845	14486
20°	16112	14243	13816
25°	15821	13668	13209
30°	15411	13083	12607
35°	14996	12520	12166
40°	14558	12033	11726
45°	14144	11591	11345
50°	13695	11183	10966
55°	13227	10751	10583
60°	12651	10300	10179
65°	12055	9782	9714
70°	11377	9225	9213
75°	10511	8668	8741
80°	9141	8090	8252
85°	7769	7544	7828

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14144 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	1.8
10°-20°	286.5	5.2
20°-30°	434.1	7.8
30°-40°	528.7	9.6
40°-50°	568.8	10.3
50°-60°	552.4	10.0
60°-70°	482.4	8.7
70°-80°	371.3	6.7
80°-90°	250.2	4.5
90°-100°	205.0	3.7
100°-110°	231.5	4.2
110°-120°	264.4	4.8
120°-130°	285.0	5.2
130°-140°	287.6	5.2
140°-150°	266.3	4.8
150°-160°	220.6	4.0
160°-170°	146.3	2.6
170°-180°	51.1	0.9
0°-30°	820.6	14.8
0°-40°	1349.2	24.4
0°-60°	2470.4	44.7
0°-90°	3574.3	64.6
90°-120°	700.8	12.7
90°-150°	1539.7	27.8
90°-180°	1958.0	35.4
0°-180°	5532.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1054	1054	1054	1054	1054	
5°	1057	1052	1043	1052	1051	100
15°	1008	1011	1011	1025	1023	284
25°	916	927	941	959	964	421
35°	790	816	845	878	889	494
45°	648	689	742	790	805	500
55°	496	551	631	686	706	444
65°	339	414	504	567	586	337
75°	188	273	371	437	457	199
85°	55	150	247	312	333	58
90°	16	110	218	278	296	12
95°	36	112	205	263	280	36
105°	106	151	232	286	303	112
115°	188	208	276	321	336	186
125°	268	272	320	360	373	240
135°	345	350	366	397	408	267
145°	416	420	422	432	438	261
155°	476	478	479	481	480	219
165°	518	518	518	521	518	146
175°	539	538	537	540	537	51
180°	540	540	540	540	540	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1053.8	1053.8	1053.8	1053.8	1053.8
2.5°	1061.5	1056.9	1046.2	1053.8	1050.8
5°	1056.9	1052.3	1043.1	1052.3	1050.8
7.5°	1049.2	1046.2	1038.5	1049.2	1047.7
10°	1040.1	1037.0	1032.4	1044.7	1043.1
12.5°	1024.8	1026.3	1023.3	1035.5	1034.0
15°	1008.0	1011.1	1011.1	1024.8	1023.3
17.5°	986.6	992.7	997.3	1011.1	1011.1
20°	965.2	972.9	979.0	995.8	995.8
22.5°	942.3	951.5	960.7	977.5	980.5
25°	916.4	927.1	940.8	959.1	963.7
27.5°	885.8	902.6	917.9	940.8	943.9
30°	855.3	875.1	895.0	919.4	924.0
32.5°	821.7	844.6	869.0	898.0	907.2
35°	789.6	815.6	844.6	878.2	888.9
37.5°	754.5	783.5	820.1	856.8	867.5
40°	719.3	752.9	794.2	833.9	847.6
42.5°	685.7	719.3	768.2	812.5	826.3
45°	647.6	688.8	742.3	789.6	804.9
47.5°	610.9	655.2	716.3	765.2	782.0
50°	572.7	620.1	688.8	740.7	757.5
52.5°	536.1	586.5	659.8	713.2	731.6
55°	496.4	551.3	630.8	685.7	705.6
57.5°	458.2	519.3	598.7	658.3	678.1
60°	416.9	482.6	569.7	627.7	649.1
62.5°	380.3	449.0	536.1	598.7	618.5
65°	339.1	413.9	504.0	566.6	586.5
67.5°	302.4	380.3	471.9	534.5	555.9
70°	262.7	342.1	436.8	502.5	520.8
72.5°	226.0	308.5	404.7	468.9	491.8
75°	187.9	273.4	371.1	436.8	456.7
77.5°	151.2	239.8	339.1	404.7	426.1
80°	114.5	207.7	307.0	371.1	392.5
82.5°	84.0	175.6	276.4	340.6	360.4
85°	55.0	149.7	247.4	311.6	332.9
87.5°	33.6	125.2	223.0	285.6	305.5
90°	15.8	109.8	217.5	277.7	296.5
92.5°	23.7	108.4	202.0	262.0	280.3
95°	35.9	112.2	204.8	262.9	280.2
97.5°	50.3	120.1	210.5	267.1	285.4
100°	68.6	128.7	215.6	272.1	288.4
102.5°	86.2	139.3	223.6	279.0	295.4
105°	105.6	151.2	231.5	285.9	302.7
107.5°	126.5	165.0	241.4	293.8	308.3
110°	145.1	178.4	253.2	302.1	317.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	166.9	194.1	263.9	311.4	327.3
115°	188.3	207.9	275.7	321.1	336.5
117.5°	208.3	224.1	285.9	330.5	344.3
120°	229.7	239.4	296.9	339.6	355.0
122.5°	249.3	255.3	309.5	349.5	362.3
125°	268.3	272.4	319.8	359.7	373.0
127.5°	288.3	291.7	331.2	367.5	379.9
130°	307.0	311.3	342.5	378.3	388.7
132.5°	328.0	330.9	354.3	387.2	398.0
135°	344.6	349.6	365.8	397.4	408.3
137.5°	364.6	368.7	377.3	405.9	414.8
140°	382.4	385.0	390.4	414.8	422.1
142.5°	400.6	403.2	404.6	423.3	429.2
145°	416.4	419.6	422.4	432.0	437.8
147.5°	431.9	436.0	437.8	440.3	443.0
150°	447.9	450.6	452.4	453.8	452.4
152.5°	462.0	464.7	467.0	468.8	467.0
155°	476.1	477.5	478.8	481.1	479.8
157.5°	488.4	489.3	490.2	493.4	491.2
160°	499.4	500.3	500.7	503.5	501.6
162.5°	509.4	509.4	509.8	513.0	510.7
165°	518.0	517.6	517.6	520.8	518.5
167.5°	525.8	524.4	524.4	527.6	525.3
170°	531.7	530.3	529.9	533.1	530.3
172.5°	535.8	534.4	534.0	537.2	534.4
175°	539.0	537.6	536.7	539.9	537.2
177.5°	540.8	539.4	538.5	541.3	538.5
180°	539.9	539.9	539.9	539.9	539.9

(END OF REPORT)