

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: P1029530

Luminaire Tested: S122DIW-B485D435UB2750-4F0-XX-W2A-F1_3500K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029530
REPORT IS A COMBINATION OF REPORTS P986139 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B485D435UB2750-4F0-XX-W2A-F1_3500K
Description: Define 2 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

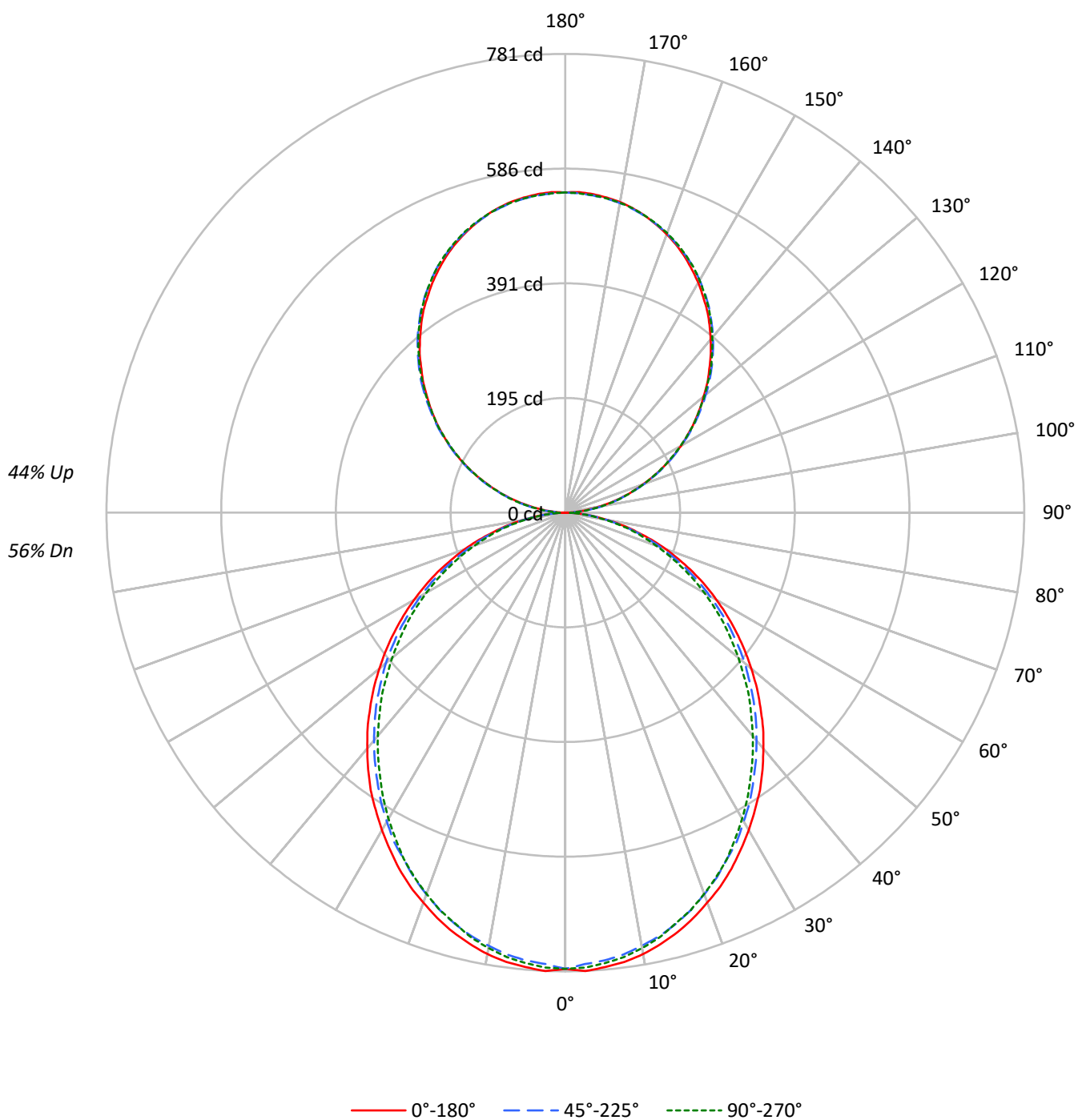
Lumens per Lamp: N/A
Luminaire Lumens: 3502.0 lumens
Efficiency: N/A
Efficacy: 94.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 37.2
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	99	95	91	87	92	88	85	82	76	74	71	65	63	62	55	54	52
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44
3	82	73	65	60	76	68	61	56	59	54	50	51	47	44	43	40	38
4	75	65	57	50	70	60	53	48	52	47	42	45	41	37	38	35	32
5	69	58	49	43	64	54	47	41	47	41	37	41	36	32	34	31	28
6	64	52	43	38	59	48	41	36	42	36	32	37	32	28	31	28	25
7	59	47	39	33	55	44	37	31	38	33	28	33	29	25	29	25	22
8	55	42	35	29	51	40	33	28	35	29	25	31	26	22	26	23	20
9	51	39	31	26	48	37	30	25	32	27	23	28	24	20	24	21	18
10	48	36	28	23	44	34	27	22	30	24	20	26	22	18	23	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12295	12295	12295
5°	12315	11719	11636
10°	12213	11184	10963
15°	12035	10647	10255
20°	11794	10061	9585
25°	11552	9451	8916
30°	11249	8876	8212
35°	10964	8270	7524
40°	10611	7671	6870
45°	10258	7078	6231
50°	9876	6475	5568
55°	9473	5829	4939
60°	9018	5131	4286
65°	8521	4421	3599
70°	7891	3643	2907
75°	7021	2808	2243
80°	5964	1908	1444
85°	4322	887	614

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10258 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.1	2.1
10°-20°	205.7	5.9
20°-30°	302.3	8.6
30°-40°	351.0	10.0
40°-50°	350.6	10.0
50°-60°	305.7	8.7
60°-70°	226.0	6.5
70°-80°	127.9	3.7
80°-90°	35.3	1.0
90°-100°	33.7	1.0
100°-110°	107.2	3.1
110°-120°	183.5	5.2
120°-130°	241.3	6.9
130°-140°	270.9	7.7
140°-150°	265.6	7.6
150°-160°	222.8	6.4
160°-170°	147.8	4.2
170°-180°	51.6	1.5
0°-30°	581.0	16.6
0°-40°	932.1	26.6
0°-60°	1588.4	45.4
0°-90°	1977.6	56.5
90°-120°	324.4	9.3
90°-150°	1102.2	31.5
90°-180°	1524.0	43.5
0°-180°	3502.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	777	777	777	777	777	
5°	777	774	766	772	770	74
15°	739	735	725	728	724	208
25°	669	663	650	652	650	308
35°	577	570	558	553	550	360
45°	470	464	453	445	442	363
55°	356	351	342	333	329	318
65°	240	235	228	221	217	237
75°	126	124	120	116	117	134
85°	31	30	29	27	26	34
90°	0	6	16	15	16	3
95°	24	28	29	29	28	27
105°	99	100	101	102	102	104
115°	184	187	186	185	184	182
125°	268	272	271	269	269	239
135°	346	352	352	352	351	268
145°	421	424	426	427	425	263
155°	481	482	484	486	484	221
165°	523	523	523	526	524	148
175°	544	543	542	545	542	52
180°	545	545	545	545	545	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	776.7	776.7	776.7	776.7	776.7
2.5°	781.2	777.4	769.2	776.7	775.2
5°	776.7	773.7	765.5	771.5	770.0
7.5°	771.5	767.0	758.8	764.7	763.2
10°	763.2	758.0	749.0	755.0	752.8
12.5°	752.0	747.6	738.6	742.3	740.8
15°	739.3	734.9	725.2	728.1	724.4
17.5°	723.7	719.2	709.5	713.2	709.5
20°	706.5	702.0	691.5	693.8	690.8
22.5°	689.3	682.6	672.9	672.9	671.4
25°	669.1	663.2	650.5	652.0	650.5
27.5°	646.7	641.5	631.8	629.6	625.8
30°	624.3	618.4	607.2	604.9	601.9
32.5°	600.4	596.0	584.0	579.5	576.5
35°	577.3	569.8	557.9	553.4	549.7
37.5°	551.1	544.4	532.5	527.2	523.5
40°	524.3	518.3	506.3	499.6	496.6
42.5°	498.1	492.1	480.2	472.7	468.2
45°	469.7	464.5	453.3	445.1	442.1
47.5°	442.1	436.9	424.9	416.7	412.2
50°	413.0	409.3	398.8	388.3	384.6
52.5°	384.6	379.4	369.7	361.5	356.2
55°	355.5	351.0	342.0	333.1	329.3
57.5°	326.4	322.6	312.9	304.0	301.0
60°	297.2	294.2	283.8	275.6	273.3
62.5°	268.9	263.6	256.2	248.7	245.7
65°	239.7	235.2	227.8	221.1	217.3
67.5°	209.9	206.1	199.4	194.2	191.2
70°	182.2	179.2	172.5	167.3	164.3
72.5°	153.8	150.9	147.1	141.9	139.7
75°	125.5	124.0	120.2	115.8	117.2
77.5°	100.1	97.1	95.6	93.4	91.1
80°	74.7	73.9	72.4	70.2	68.7
82.5°	50.8	50.8	50.0	47.0	47.0
85°	30.6	29.9	29.1	26.9	26.1
87.5°	13.4	11.9	10.5	8.2	7.5
90°	0.5	6.0	16.1	15.2	15.6
92.5°	10.1	13.8	14.3	14.7	14.7
95°	23.9	28.5	29.4	29.4	28.5
97.5°	40.0	44.2	46.0	46.0	46.0
100°	58.4	62.1	63.5	63.5	63.0
102.5°	77.8	80.5	82.4	82.8	82.4
105°	98.9	100.3	101.2	102.2	102.2
107.5°	120.1	121.9	121.9	122.4	120.1
110°	140.3	143.1	143.1	143.1	141.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	162.4	165.2	164.7	163.3	162.4
115°	184.1	186.8	185.9	185.4	184.1
117.5°	205.7	209.4	207.1	205.7	204.3
120°	227.3	231.0	227.3	227.3	225.9
122.5°	247.1	251.7	249.4	248.0	247.1
125°	267.8	271.9	270.6	269.2	268.7
127.5°	288.0	293.1	291.3	289.4	288.0
130°	306.9	312.9	312.0	311.1	309.2
132.5°	328.1	332.7	333.1	330.8	329.5
135°	346.5	351.5	352.5	352.0	350.6
137.5°	366.7	370.9	371.8	371.3	369.5
140°	384.7	388.8	391.1	391.1	389.3
142.5°	403.1	407.2	408.6	409.1	407.2
145°	420.6	423.8	426.5	427.0	425.2
147.5°	436.2	440.4	442.2	443.1	441.3
150°	452.3	455.1	456.9	458.3	456.9
152.5°	466.6	469.3	471.6	473.5	471.6
155°	480.8	482.2	483.6	485.9	484.5
157.5°	493.3	494.2	495.1	498.3	496.0
160°	504.3	505.2	505.7	508.5	506.6
162.5°	514.4	514.4	514.9	518.1	515.8
165°	523.2	522.7	522.7	525.9	523.6
167.5°	531.0	529.6	529.6	532.8	530.5
170°	537.0	535.6	535.1	538.4	535.6
172.5°	541.1	539.7	539.3	542.5	539.7
175°	544.3	543.0	542.0	545.3	542.5
177.5°	546.2	544.8	543.9	546.6	543.9
180°	545.3	545.3	545.3	545.3	545.3

(END OF REPORT)