

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: P1033626

Luminaire Tested: S124DIW-B575D470UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033626
REPORT IS A COMBINATION OF REPORTS P997841 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D470UB30-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

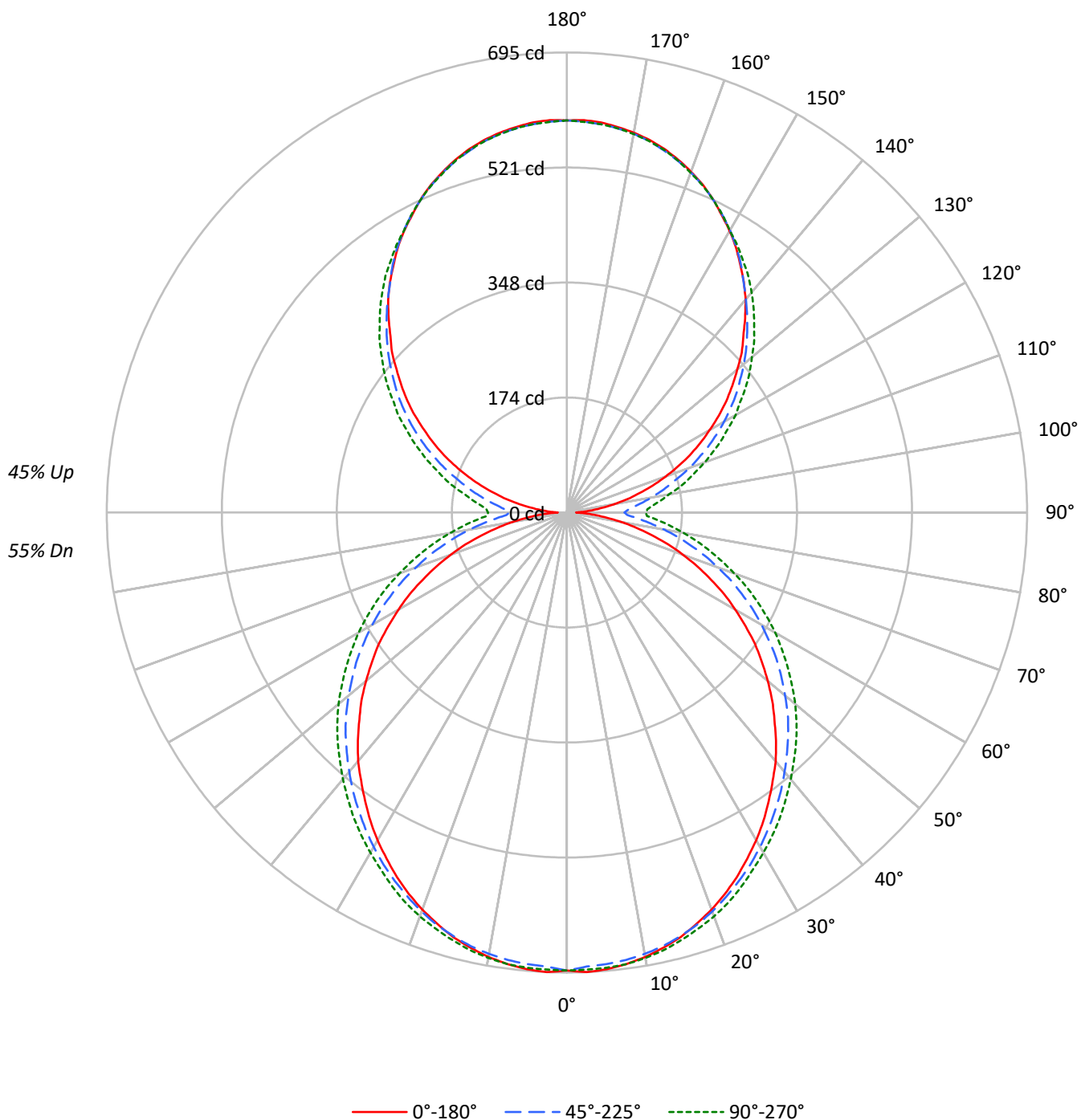
Lumens per Lamp: N/A
Luminaire Lumens: 4004.0 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60
1	98	93	89	85	90	86	82	79	74	71	68	62	60	58	52	50	49
2	88	80	74	68	82	75	69	64	64	59	56	54	51	48	45	42	40
3	80	70	62	56	74	65	58	53	56	51	46	47	43	40	39	36	34
4	73	62	54	47	68	58	50	44	49	44	39	42	37	34	35	31	29
5	67	55	47	40	62	51	44	38	44	38	33	37	33	29	31	28	25
6	62	49	41	35	57	46	38	33	40	34	29	34	29	25	28	25	22
7	57	44	36	30	53	41	34	29	36	30	25	31	26	22	26	22	19
8	53	40	32	27	49	38	30	25	33	27	23	28	23	20	24	20	17
9	49	37	29	24	46	34	27	23	30	24	20	26	21	18	22	18	15
10	46	34	26	21	43	32	25	20	28	22	18	24	19	16	20	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5642	5642	5642
5°	5658	5495	5505
10°	5621	5387	5372
15°	5568	5266	5221
20°	5490	5133	5075
25°	5403	4988	4917
30°	5307	4845	4756
35°	5200	4698	4613
40°	5114	4557	4465
45°	4986	4424	4334
50°	4877	4274	4196
55°	4765	4129	4037
60°	4591	3949	3887
65°	4399	3754	3706
70°	4165	3531	3498
75°	3841	3285	3299
80°	3475	3032	3092
85°	2991	2780	2924

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4986 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.6	1.6
10°-20°	187.8	4.7
20°-30°	284.0	7.1
30°-40°	343.6	8.6
40°-50°	363.2	9.1
50°-60°	341.9	8.5
60°-70°	283.7	7.1
70°-80°	199.1	5.0
80°-90°	113.5	2.8
90°-100°	105.4	2.6
100°-110°	165.1	4.1
110°-120°	229.7	5.7
120°-130°	277.8	6.9
130°-140°	299.1	7.5
140°-150°	287.7	7.2
150°-160°	240.6	6.0
160°-170°	160.1	4.0
170°-180°	56.1	1.4
0°-30°	537.4	13.4
0°-40°	881.0	22.0
0°-60°	1586.1	39.6
0°-90°	2182.4	54.5
90°-120°	500.2	12.5
90°-150°	1364.9	34.1
90°-180°	1822.0	45.5
0°-180°	4004.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	692	692	692	692	692	
5°	693	690	685	691	690	66
15°	664	665	662	669	669	187
25°	608	612	614	623	624	280
35°	532	541	549	559	562	333
45°	443	458	473	486	490	343
55°	347	363	387	402	407	309
65°	240	265	291	311	317	238
75°	133	162	194	216	223	142
85°	41	74	108	132	140	43
90°	14	50	87	112	119	11
95°	38	67	102	124	132	38
105°	114	130	160	181	188	121
115°	204	211	235	252	257	202
125°	294	293	312	326	330	262
135°	377	380	385	396	400	292
145°	457	458	458	462	464	286
155°	522	522	522	524	522	240
165°	569	567	566	569	567	160
175°	592	589	589	592	589	56
180°	592	592	592	592	592	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	691.9	691.9	691.9	691.9	691.9
2.5°	695.0	692.7	686.5	691.9	691.1
5°	692.7	690.4	684.9	691.1	690.4
7.5°	688.0	686.5	681.8	688.8	688.0
10°	681.8	681.1	677.2	684.2	683.4
12.5°	673.3	673.3	671.0	677.2	677.2
15°	664.0	664.8	662.5	669.4	668.7
17.5°	651.6	653.9	653.2	660.1	659.4
20°	638.4	640.8	641.5	649.3	649.3
22.5°	623.7	626.8	628.4	636.1	637.7
25°	607.5	612.1	614.4	623.0	623.7
27.5°	589.6	596.6	599.7	607.5	608.2
30°	571.8	578.0	583.4	592.0	593.5
32.5°	552.4	560.2	566.4	576.5	578.0
35°	531.5	540.8	548.6	559.4	561.7
37.5°	510.6	521.4	530.7	541.6	543.9
40°	490.5	500.5	511.4	523.0	526.1
42.5°	467.2	478.8	492.0	505.2	507.5
45°	443.2	457.9	472.6	485.8	489.7
47.5°	420.7	435.4	452.5	465.7	470.3
50°	395.9	413.0	430.0	445.5	450.2
52.5°	371.1	388.2	408.3	423.8	428.5
55°	347.1	363.4	386.6	402.1	406.8
57.5°	320.0	340.1	362.6	381.2	385.1
60°	293.7	313.8	339.4	357.2	363.4
62.5°	268.1	290.6	316.1	333.9	340.1
65°	240.2	265.0	291.3	310.7	316.9
67.5°	213.8	240.2	268.1	287.5	293.7
70°	186.7	213.1	242.5	263.4	268.9
72.5°	160.4	187.5	219.3	239.4	245.6
75°	133.3	161.9	194.5	216.2	223.1
77.5°	107.7	137.9	172.0	193.7	201.5
80°	84.5	115.4	149.5	172.8	179.0
82.5°	61.2	93.8	127.8	151.9	158.8
85°	41.1	73.6	108.5	131.7	139.5
87.5°	25.6	57.3	91.4	113.9	120.9
90°	13.8	49.8	86.8	112.0	119.1
92.5°	23.5	56.6	92.3	115.3	122.0
95°	37.6	67.2	102.2	124.5	131.5
97.5°	53.3	79.4	114.8	136.8	143.8
100°	72.6	94.7	129.0	150.8	156.2
102.5°	93.7	111.3	144.3	165.9	172.6
105°	113.8	129.7	160.1	180.9	188.5
107.5°	136.2	149.8	177.4	198.6	203.6
110°	158.3	170.0	196.8	213.7	221.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	181.3	190.6	215.3	232.3	238.5
115°	204.4	211.4	235.2	251.9	256.8
117.5°	226.8	231.5	254.3	269.2	274.0
120°	248.6	252.7	273.8	287.0	294.1
122.5°	271.9	272.4	292.8	307.0	310.1
125°	294.0	293.2	312.2	326.0	329.7
127.5°	314.7	315.2	329.8	342.9	347.8
130°	335.8	336.4	348.8	361.9	364.7
132.5°	358.3	358.4	367.3	379.5	383.8
135°	376.7	379.5	385.0	396.5	399.7
137.5°	398.3	399.0	403.0	413.2	417.6
140°	419.8	420.0	420.7	430.4	433.8
142.5°	438.8	439.7	438.5	447.0	450.1
145°	456.7	457.7	458.2	462.3	464.0
147.5°	475.0	476.5	476.0	476.4	479.0
150°	491.5	492.5	492.5	492.5	492.1
152.5°	506.3	507.2	507.7	509.0	507.7
155°	522.3	522.3	521.9	523.7	521.9
157.5°	536.1	535.1	535.1	536.5	535.1
160°	548.0	547.5	547.1	548.4	546.1
162.5°	559.0	557.6	557.1	559.9	557.6
165°	568.6	567.2	566.3	569.0	567.2
167.5°	576.4	574.5	574.5	577.3	574.5
170°	582.8	580.5	581.0	583.7	580.5
172.5°	587.4	585.5	585.5	588.7	585.5
175°	591.5	589.2	588.7	592.0	588.7
177.5°	593.3	591.0	591.0	594.2	590.6
180°	592.4	592.4	592.4	592.4	592.4

(END OF REPORT)