

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: P1033661

Luminaire Tested: S124DIW-B575D770UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033661
REPORT IS A COMBINATION OF REPORTS P997915 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D770UB35-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

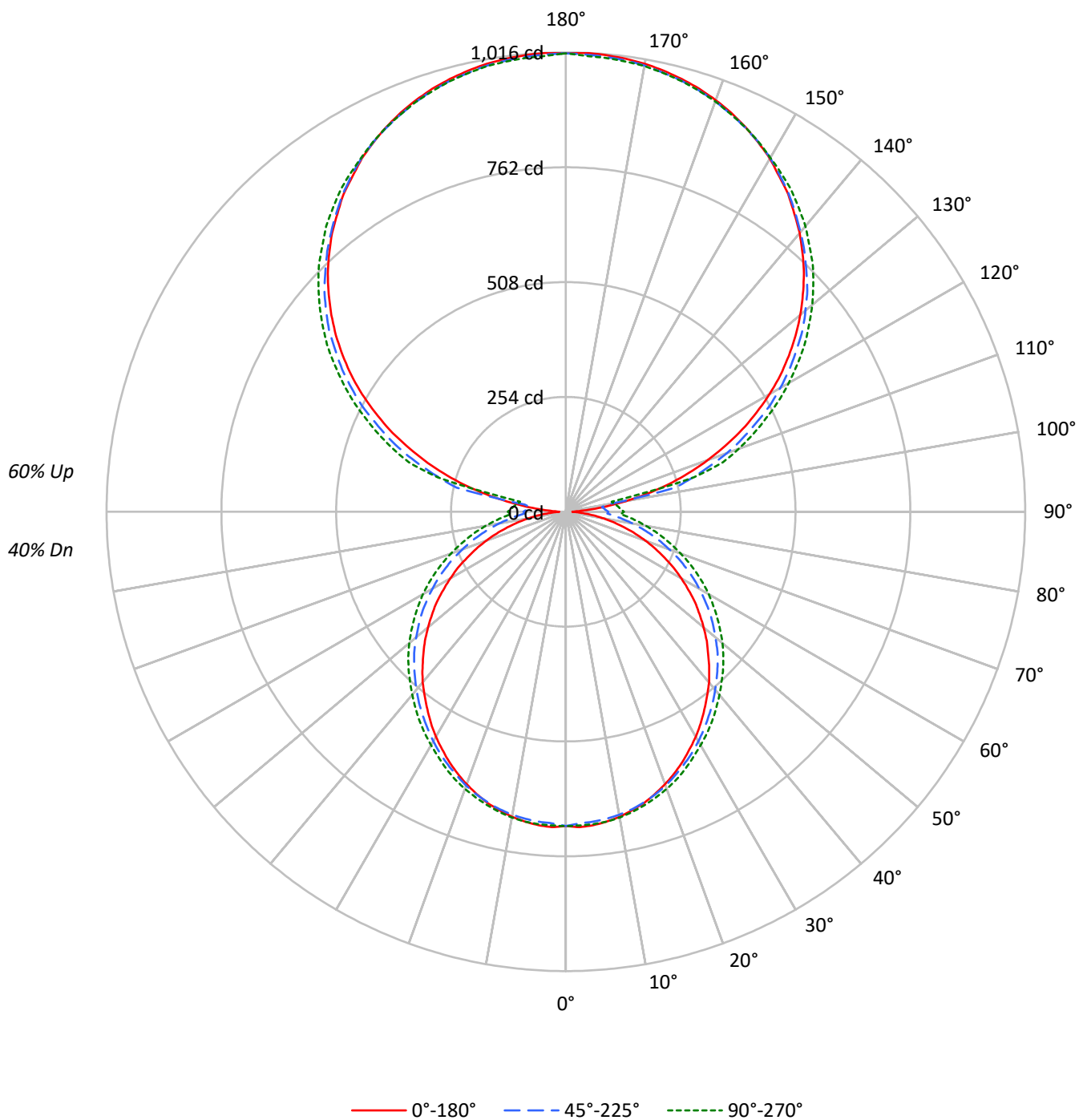
Lumens per Lamp: N/A
Luminaire Lumens: 5509.0 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 47.2
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40		
1	95	90	86	82	86	82	78	75	67	64	62	53	51	50	40	39	38	32		
2	86	78	72	66	78	71	66	61	58	54	51	46	43	41	35	33	31	26		
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	22		
4	71	60	52	46	64	55	48	43	45	40	36	36	32	29	27	24	22	18		
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	21	19	16		
6	60	48	40	34	54	44	37	31	36	30	26	29	25	22	22	19	17	14		
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15	12		
8	51	39	31	26	46	36	29	24	30	24	20	24	20	17	18	15	13	11		
9	48	35	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12	10		
10	44	32	25	20	40	30	23	19	25	20	16	20	16	13	16	13	11	9		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5668	5668	5668
5°	5684	5521	5531
10°	5647	5412	5397
15°	5594	5290	5246
20°	5516	5157	5098
25°	5428	5012	4940
30°	5333	4868	4779
35°	5224	4720	4635
40°	5137	4578	4486
45°	5010	4445	4354
50°	4901	4294	4216
55°	4787	4148	4055
60°	4611	3967	3905
65°	4419	3772	3724
70°	4185	3547	3514
75°	3859	3300	3315
80°	3488	3046	3106
85°	3005	2793	2937

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5010 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.9	1.2
10°-20°	188.7	3.4
20°-30°	285.3	5.2
30°-40°	345.2	6.3
40°-50°	364.9	6.6
50°-60°	343.5	6.2
60°-70°	285.0	5.2
70°-80°	200.0	3.6
80°-90°	114.8	2.1
90°-100°	100.8	1.8
100°-110°	271.3	4.9
110°-120°	456.5	8.3
120°-130°	556.0	10.1
130°-140°	582.8	10.6
140°-150°	539.0	9.8
150°-160°	433.4	7.9
160°-170°	279.5	5.1
170°-180°	96.3	1.7
0°-30°	539.9	9.8
0°-40°	885.1	16.1
0°-60°	1593.5	28.9
0°-90°	2193.4	39.8
90°-120°	828.6	15.0
90°-150°	2506.5	45.5
90°-180°	3316.0	60.2
0°-180°	5509.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	696	694	688	694	694	66
15°	667	668	666	673	672	188
25°	610	615	617	626	627	281
35°	534	543	551	562	564	334
45°	445	460	475	488	492	344
55°	349	365	388	404	409	311
65°	241	266	293	312	318	239
75°	134	163	195	217	224	142
85°	41	74	109	132	140	43
90°	15	54	94	121	129	11
95°	52	52	84	110	118	59
105°	235	255	288	314	293	247
115°	431	440	464	483	488	424
125°	602	604	622	639	645	538
135°	745	744	752	766	772	574
145°	858	859	859	864	869	536
155°	939	940	938	941	939	433
165°	991	987	987	993	986	280
175°	1014	1009	1010	1017	1008	97
180°	1014	1014	1014	1014	1014	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	695.1	695.1	695.1	695.1	695.1
2.5°	698.2	695.9	689.7	695.1	694.4
5°	695.9	693.6	688.1	694.4	693.6
7.5°	691.2	689.7	685.0	692.0	691.2
10°	685.0	684.2	680.3	687.4	686.6
12.5°	676.5	676.5	674.1	680.3	680.3
15°	667.1	667.9	665.6	672.6	671.8
17.5°	654.7	657.0	656.2	663.2	662.4
20°	641.4	643.8	644.5	652.3	652.3
22.5°	626.6	629.7	631.3	639.1	640.6
25°	610.3	615.0	617.3	625.9	626.6
27.5°	592.4	599.4	602.5	610.3	611.1
30°	574.5	580.7	586.2	594.7	596.3
32.5°	555.0	562.8	569.0	579.1	580.7
35°	534.0	543.3	551.1	562.0	564.4
37.5°	513.0	523.9	533.2	544.1	546.5
40°	492.7	502.9	513.8	525.4	528.6
42.5°	469.4	481.1	494.3	507.5	509.9
45°	445.3	460.1	474.8	488.1	492.0
47.5°	422.7	437.5	454.6	467.8	472.5
50°	397.8	414.9	432.0	447.6	452.3
52.5°	372.9	390.0	410.2	425.8	430.5
55°	348.7	365.1	388.4	404.0	408.7
57.5°	321.5	341.7	364.3	383.0	386.9
60°	295.0	315.3	341.0	358.9	365.1
62.5°	269.3	291.9	317.6	335.5	341.7
65°	241.3	266.2	292.7	312.1	318.4
67.5°	214.8	241.3	269.3	288.8	295.0
70°	187.6	214.1	243.6	264.7	270.1
72.5°	161.1	188.4	220.3	240.5	246.8
75°	133.9	162.7	195.4	217.2	224.2
77.5°	108.2	138.6	172.8	194.6	202.4
80°	84.8	116.0	150.2	173.6	179.8
82.5°	61.5	94.2	128.4	152.6	159.6
85°	41.3	74.0	109.0	132.3	140.1
87.5°	25.7	57.6	91.9	114.4	121.4
90°	14.8	54.2	93.8	120.8	128.6
92.5°	23.1	48.8	88.3	114.7	120.9
95°	51.8	51.7	84.4	109.9	117.7
97.5°	88.9	128.2	80.5	104.6	112.3
100°	132.9	166.8	92.6	100.7	106.8
102.5°	183.0	209.2	247.9	97.5	103.7
105°	235.2	255.4	288.0	314.2	293.2
107.5°	284.5	300.0	332.6	355.8	364.3
110°	333.8	346.9	378.8	398.2	406.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	381.5	395.4	422.6	439.0	448.2
115°	430.8	440.1	464.2	482.9	488.4
117.5°	475.6	483.2	508.9	524.4	530.7
120°	520.3	525.6	547.4	564.5	569.2
122.5°	562.7	564.2	586.7	603.1	607.0
125°	602.1	604.3	622.3	639.4	644.9
127.5°	640.8	640.7	660.1	673.4	678.1
130°	677.1	677.2	691.9	706.6	711.3
132.5°	711.2	712.1	724.4	738.4	742.3
135°	744.7	743.9	752.3	766.4	772.5
137.5°	775.0	774.2	781.1	794.3	797.4
140°	804.6	805.3	807.6	820.0	824.6
142.5°	830.3	833.3	833.3	843.4	846.5
145°	857.6	859.1	859.1	864.5	869.1
147.5°	878.8	882.6	881.8	883.4	887.2
150°	902.3	904.6	903.8	903.8	904.6
152.5°	921.2	923.5	922.0	923.5	922.8
155°	939.4	940.2	937.9	941.0	938.7
157.5°	955.4	955.4	952.3	956.1	952.3
160°	969.0	966.7	966.0	970.5	966.0
162.5°	981.1	978.1	977.4	981.9	976.6
165°	991.0	987.2	987.2	993.3	986.5
167.5°	999.3	995.6	994.8	1001.6	994.0
170°	1006.2	1001.6	1002.4	1008.4	1000.9
172.5°	1010.7	1006.2	1006.9	1013.0	1004.7
175°	1013.8	1009.2	1010.0	1016.8	1007.7
177.5°	1016.0	1010.7	1012.2	1018.3	1009.2
180°	1013.8	1013.8	1013.8	1013.8	1013.8

(END OF REPORT)