

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: P1033808

Luminaire Tested: S124DIW-B795D770UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033808
REPORT IS A COMBINATION OF REPORTS P998245 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D770UB35-4F0-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

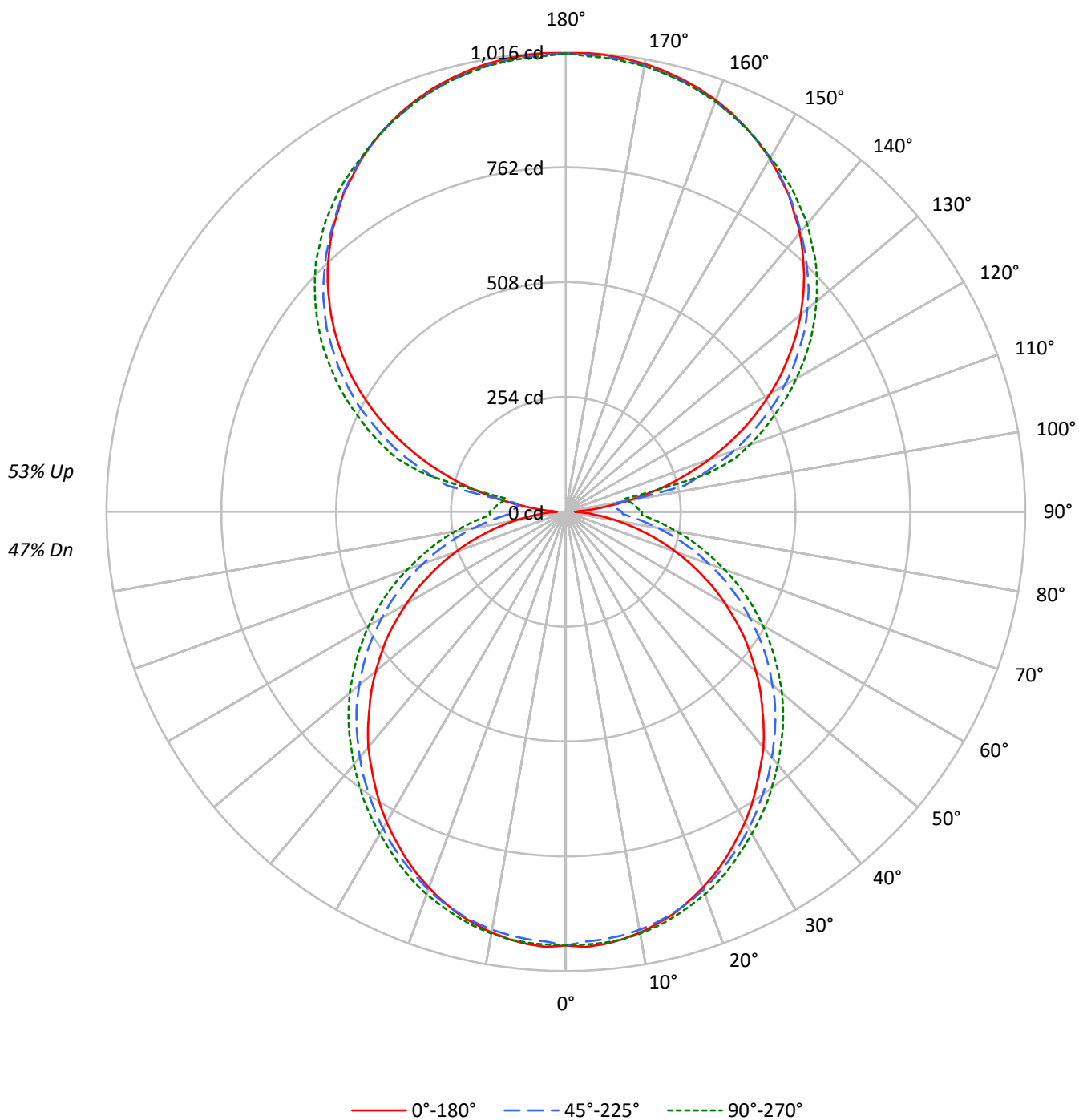
Lumens per Lamp: N/A
Luminaire Lumens: 6409.0 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 59.1
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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	54	54	54	47	47	47
1	96	91	87	83	88	84	80	77	70	68	65	58	56	54	46	45	43	38	38	38
2	87	79	73	67	80	73	67	62	61	57	53	50	47	44	40	38	36	31	31	31
3	79	69	62	56	72	64	57	52	53	48	44	44	40	37	35	32	30	26	26	26
4	72	61	53	47	66	56	49	44	47	42	37	39	35	31	31	28	26	22	22	22
5	66	54	46	40	61	50	43	37	42	36	32	35	30	27	28	25	22	19	19	19
6	61	49	40	34	56	45	37	32	38	32	28	31	27	23	25	22	19	16	16	16
7	56	44	36	30	51	40	33	28	34	28	24	28	24	21	23	20	17	14	14	14
8	52	40	32	26	48	37	30	25	31	25	21	26	21	18	21	18	15	13	13	13
9	49	36	28	23	44	33	27	22	28	23	19	24	19	16	19	16	14	11	11	11
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	12	10	10	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7821	7821	7821
5°	7843	7617	7631
10°	7791	7467	7446
15°	7718	7299	7237
20°	7611	7116	7034
25°	7489	6915	6816
30°	7357	6715	6593
35°	7208	6512	6395
40°	7089	6317	6190
45°	6911	6133	6008
50°	6761	5924	5816
55°	6605	5723	5595
60°	6364	5473	5387
65°	6097	5203	5138
70°	5774	4896	4849
75°	5323	4553	4573
80°	4816	4204	4286
85°	4141	3854	4052

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6911 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.9	1.4
10°-20°	260.4	4.1
20°-30°	393.7	6.1
30°-40°	476.3	7.4
40°-50°	503.5	7.9
50°-60°	473.9	7.4
60°-70°	393.2	6.1
70°-80°	276.0	4.3
80°-90°	157.7	2.5
90°-100°	126.3	2.0
100°-110°	290.2	4.5
110°-120°	469.2	7.3
120°-130°	563.1	8.8
130°-140°	585.9	9.1
140°-150°	539.6	8.4
150°-160°	433.4	6.8
160°-170°	279.5	4.4
170°-180°	96.3	1.5
0°-30°	744.9	11.6
0°-40°	1221.2	19.1
0°-60°	2198.6	34.3
0°-90°	3025.5	47.2
90°-120°	885.7	13.8
90°-150°	2574.3	40.2
90°-180°	3383.0	52.8
0°-180°	6409.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	959	959	959	959	959	
5°	960	957	949	958	957	91
15°	920	922	918	928	927	259
25°	842	848	852	864	865	388
35°	737	750	760	776	779	461
45°	614	635	655	673	679	475
55°	481	504	536	557	564	429
65°	333	367	404	431	439	330
75°	185	224	270	300	309	196
85°	57	102	150	183	193	59
90°	20	71	123	159	169	14
95°	56	65	110	144	154	63
105°	238	264	308	341	322	250
115°	432	444	478	503	511	426
125°	603	605	631	653	660	539
135°	745	744	755	774	782	575
145°	858	859	859	866	872	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°	959.1	959.1	959.1	959.1	959.1
2.5°	963.4	960.2	951.6	959.1	958.0
5°	960.2	957.0	949.4	958.0	957.0
7.5°	953.7	951.6	945.1	954.8	953.7
10°	945.1	944.1	938.7	948.4	947.3
12.5°	933.3	933.3	930.1	938.7	938.7
15°	920.4	921.5	918.3	928.0	926.9
17.5°	903.3	906.5	905.4	915.1	914.0
20°	885.0	888.2	889.3	900.0	900.0
22.5°	864.6	868.9	871.0	881.8	883.9
25°	842.0	848.5	851.7	863.5	864.6
27.5°	817.3	827.0	831.3	842.0	843.1
30°	792.6	801.2	808.7	820.6	822.7
32.5°	765.8	776.5	785.1	799.1	801.2
35°	736.8	749.7	760.4	775.5	778.7
37.5°	707.8	722.8	735.7	750.7	754.0
40°	679.9	693.8	708.9	725.0	729.3
42.5°	647.6	663.8	682.0	700.3	703.5
45°	614.3	634.8	655.2	673.4	678.8
47.5°	583.2	603.6	627.2	645.5	651.9
50°	548.8	572.5	596.1	617.6	624.0
52.5°	514.5	538.1	566.0	587.5	593.9
55°	481.2	503.7	535.9	557.4	563.9
57.5°	443.6	471.5	502.6	528.4	533.8
60°	407.1	435.0	470.4	495.1	503.7
62.5°	371.6	402.8	438.2	462.9	471.5
65°	332.9	367.3	403.8	430.7	439.3
67.5°	296.4	332.9	371.6	398.5	407.1
70°	258.8	295.4	336.2	365.2	372.7
72.5°	222.3	259.9	304.0	331.9	340.5
75°	184.7	224.5	269.6	299.7	309.3
77.5°	149.3	191.2	238.4	268.5	279.2
80°	117.1	160.0	207.3	239.5	248.1
82.5°	84.8	130.0	177.2	210.5	220.2
85°	56.9	102.0	150.4	182.6	193.3
87.5°	35.4	79.5	126.7	157.9	167.5
90°	19.5	70.7	123.0	158.7	168.8
92.5°	27.5	63.6	115.8	150.5	159.1
95°	55.7	65.3	110.1	143.6	154.1
97.5°	92.5	140.3	104.8	136.5	146.9
100°	136.1	177.7	115.0	131.1	139.3
102.5°	186.2	218.9	268.9	126.2	134.8
105°	237.9	263.9	307.5	341.1	322.4
107.5°	287.2	307.7	350.6	381.3	391.8
110°	336.2	353.4	395.6	421.8	432.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	383.6	401.0	437.9	460.9	472.5
115°	432.5	444.5	478.1	503.3	510.8
117.5°	477.3	486.8	521.3	543.1	551.7
120°	521.8	528.0	558.3	581.3	588.4
122.5°	564.2	565.7	596.2	618.4	624.5
125°	603.3	605.2	630.6	653.3	660.5
127.5°	642.0	641.6	666.9	685.5	692.3
130°	678.0	677.7	697.2	717.3	723.7
132.5°	712.1	712.6	728.5	747.6	753.2
135°	745.2	744.4	755.0	773.8	781.7
137.5°	775.5	774.5	782.6	800.2	804.8
140°	805.1	805.6	808.1	824.4	830.5
142.5°	830.6	833.6	833.3	846.6	850.9
145°	857.9	859.1	859.1	866.2	872.0
147.5°	879.1	882.6	881.8	883.7	888.7
150°	902.6	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)