

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: P1033809

Luminaire Tested: S124DIW-B795D770UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033809
REPORT IS A COMBINATION OF REPORTS P998246 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D770UB35-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

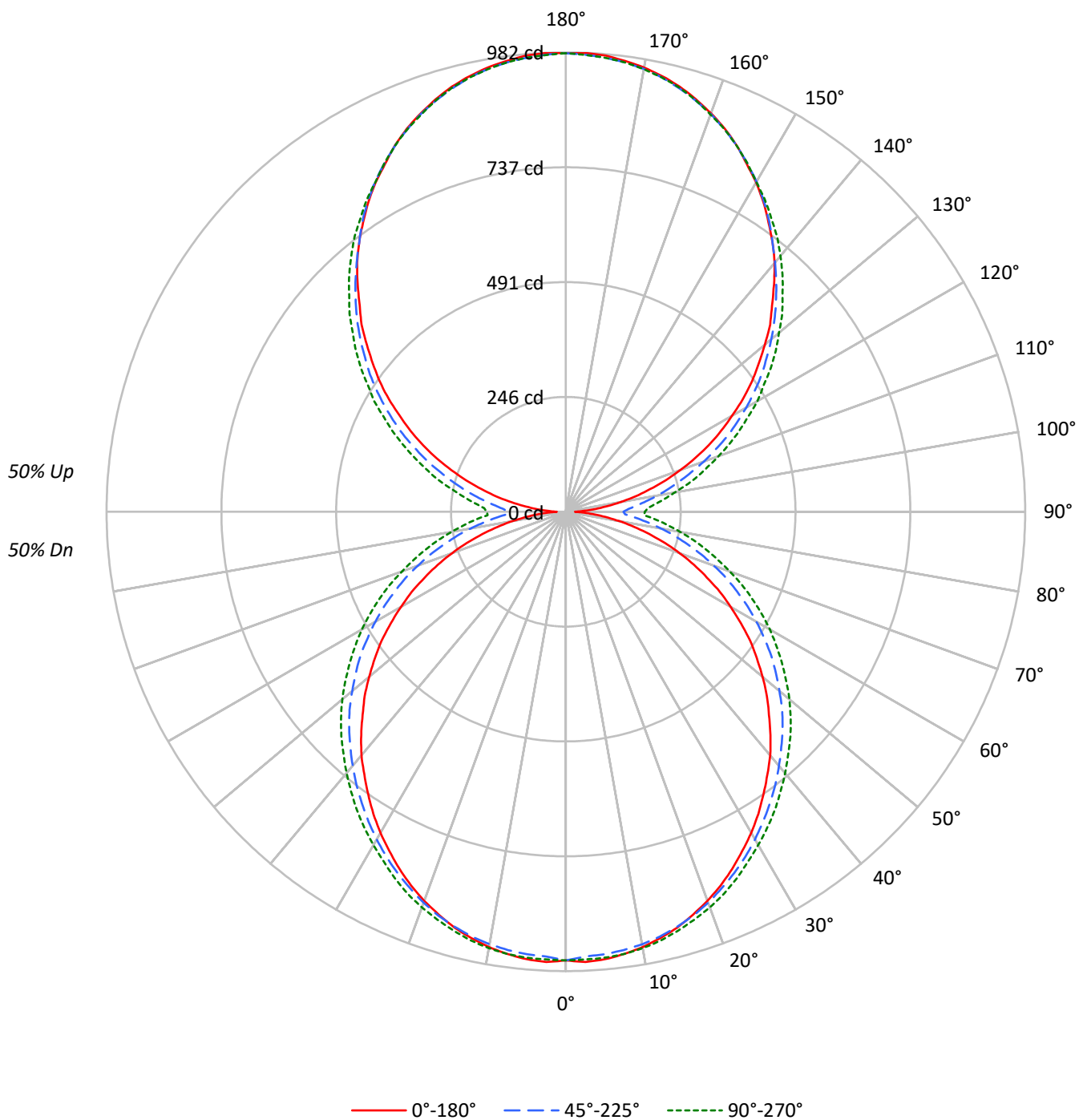
Lumens per Lamp: N/A
Luminaire Lumens: 5991.9 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57
1	97	92	88	84	89	85	81	78	72	69	67	60	58	56	48	47	46
2	88	80	73	68	81	74	68	63	62	58	54	52	49	46	42	40	38
3	80	70	62	56	73	65	58	52	55	49	45	45	41	38	37	34	32
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27
5	67	55	46	40	61	51	43	38	43	37	33	36	31	28	29	26	23
6	61	49	41	35	56	45	38	32	39	33	28	32	28	24	27	23	20
7	57	44	36	30	52	41	34	28	35	29	25	29	25	21	24	21	18
8	53	40	32	27	48	37	30	25	32	26	22	27	22	19	22	19	16
9	49	36	29	24	45	34	27	22	29	24	20	25	20	17	20	17	14
10	46	33	26	21	42	31	24	20	27	21	18	23	18	15	19	16	13

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	1.5
10°-20°	260.4	4.3
20°-30°	393.7	6.6
30°-40°	476.3	7.9
40°-50°	503.5	8.4
50°-60°	473.9	7.9
60°-70°	393.2	6.6
70°-80°	276.0	4.6
80°-90°	157.7	2.6
90°-100°	156.5	2.6
100°-110°	260.0	4.3
110°-120°	371.1	6.2
120°-130°	454.7	7.6
130°-140°	492.8	8.2
140°-150°	475.6	7.9
150°-160°	398.1	6.6
160°-170°	264.9	4.4
170°-180°	92.8	1.5
0°-30°	744.9	12.4
0°-40°	1221.2	20.4
0°-60°	2198.6	36.7
0°-90°	3025.5	50.5
90°-120°	787.6	13.1
90°-150°	2210.7	36.9
90°-180°	2966.0	49.5
0°-180°	5991.9	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	15
95°	60	102	151	182	192	60
105°	186	208	251	280	291	198
115°	337	347	380	402	409	333
125°	486	485	511	530	534	433
135°	623	628	635	651	655	482
145°	755	757	758	764	766	473
155°	864	864	864	867	864	398
165°	941	939	937	942	939	265
175°	979	975	974	980	974	93
180°	980	980	980	980	980	

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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°	35.8	83.3	133.3	165.6	175.0
95°	59.5	101.7	151.0	182.3	192.0
97.5°	85.7	122.8	173.0	203.9	213.6
100°	117.9	148.9	197.6	228.1	235.6
102.5°	152.8	177.2	224.1	254.3	263.7
105°	186.3	208.5	251.3	280.4	291.3
107.5°	223.5	242.5	280.8	310.7	317.5
110°	260.3	276.8	313.7	336.8	347.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	298.6	311.5	345.4	369.1	377.7
115°	336.9	346.6	379.5	402.4	409.1
117.5°	374.1	380.6	412.0	432.4	438.7
120°	410.2	416.5	445.3	463.0	473.1
122.5°	448.9	449.7	477.9	497.0	500.8
125°	485.7	484.6	510.8	529.6	534.5
127.5°	519.8	521.0	541.0	558.8	565.6
130°	555.1	556.3	573.5	591.4	594.8
132.5°	592.3	592.7	604.8	621.6	627.3
135°	623.0	627.6	635.2	650.8	655.0
137.5°	658.6	659.9	665.7	679.6	685.7
140°	694.3	694.8	695.8	709.0	713.7
142.5°	725.9	727.4	725.5	737.3	741.6
145°	755.4	757.4	758.1	763.8	765.8
147.5°	785.8	788.5	787.7	788.0	791.6
150°	813.1	815.0	815.0	815.0	814.2
152.5°	837.7	839.3	840.0	842.3	840.0
155°	864.3	864.3	863.5	866.6	863.5
157.5°	887.0	885.5	885.5	887.8	885.5
160°	906.7	906.0	905.2	907.5	903.7
162.5°	924.9	922.7	921.9	926.4	922.7
165°	940.9	938.6	937.1	941.6	938.6
167.5°	953.7	950.7	950.7	955.3	950.7
170°	964.4	960.6	961.3	965.9	960.6
172.5°	971.9	968.9	968.9	974.2	968.9
175°	978.8	975.0	974.2	979.5	974.2
177.5°	981.8	978.0	978.0	983.3	977.2
180°	980.3	980.3	980.3	980.3	980.3

(END OF REPORT)