

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: P1033814

Luminaire Tested: S124DIW-B795D770UB40-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033814
REPORT IS A COMBINATION OF REPORTS P998254 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D770UB40-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

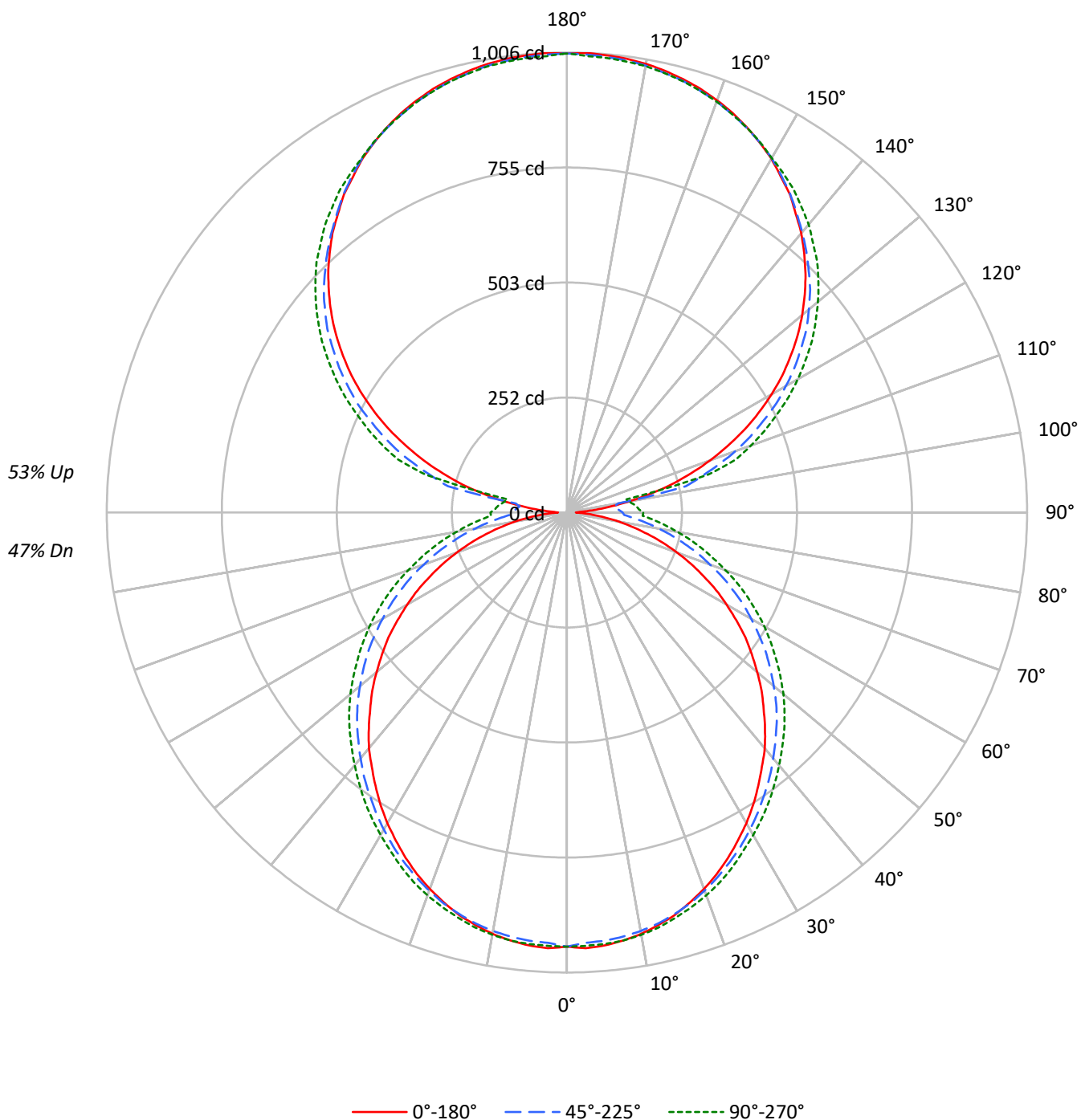
Lumens per Lamp: N/A
Luminaire Lumens: 6345.0 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1033814

CATALOG NUMBER: S124DIW-B795D770UB40-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1033814

CATALOG NUMBER: S124DIW-B795D770UB40-4F0-XX-W2A-D

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7742	7742	7742
5°	7763	7541	7554
10°	7713	7392	7371
15°	7641	7225	7164
20°	7534	7044	6964
25°	7413	6845	6747
30°	7283	6648	6527
35°	7136	6446	6330
40°	7017	6253	6127
45°	6842	6071	5947
50°	6693	5865	5757
55°	6538	5665	5539
60°	6300	5418	5333
65°	6036	5152	5085
70°	5716	4846	4799
75°	5271	4507	4527
80°	4767	4162	4242
85°	4097	3813	4012

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6842 cd/sqm

TEST NUMBER: P1033814

CATALOG NUMBER: S124DIW-B795D770UB40-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.0	1.4
10°-20°	257.7	4.1
20°-30°	389.7	6.1
30°-40°	471.5	7.4
40°-50°	498.4	7.9
50°-60°	469.1	7.4
60°-70°	389.3	6.1
70°-80°	273.2	4.3
80°-90°	156.1	2.5
90°-100°	125.0	2.0
100°-110°	287.3	4.5
110°-120°	464.6	7.3
120°-130°	557.6	8.8
130°-140°	580.1	9.1
140°-150°	534.3	8.4
150°-160°	429.1	6.8
160°-170°	276.7	4.4
170°-180°	95.4	1.5
0°-30°	737.4	11.6
0°-40°	1208.9	19.1
0°-60°	2176.5	34.3
0°-90°	2995.0	47.2
90°-120°	876.9	13.8
90°-150°	2548.9	40.2
90°-180°	3350.0	52.8
0°-180°	6345.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	949	949	949	949	949	
5°	950	947	940	948	947	90
15°	911	912	909	919	918	257
25°	834	840	843	855	856	384
35°	729	742	753	768	771	457
45°	608	628	648	667	672	470
55°	476	499	530	552	558	424
65°	330	364	400	426	435	327
75°	183	222	267	297	306	194
85°	56	101	149	181	191	59
90°	19	70	122	157	167	14
95°	55	65	109	142	153	62
105°	236	261	304	338	319	247
115°	428	440	473	498	506	422
125°	597	599	624	647	654	534
135°	738	737	748	766	774	569
145°	849	851	851	858	863	531
155°	930	931	929	932	929	429
165°	981	978	978	984	977	277
175°	1004	999	1000	1007	998	96
180°	1004	1004	1004	1004	1004	

TEST NUMBER: P1033814

CATALOG NUMBER: S124DIW-B795D770UB40-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	949.4	949.4	949.4	949.4	949.4
2.5°	953.7	950.5	942.0	949.4	948.4
5°	950.5	947.3	939.9	948.4	947.3
7.5°	944.1	942.0	935.6	945.2	944.1
10°	935.6	934.5	929.2	938.8	937.7
12.5°	923.9	923.9	920.7	929.2	929.2
15°	911.2	912.2	909.0	918.6	917.5
17.5°	894.1	897.3	896.3	905.8	904.8
20°	876.1	879.3	880.3	891.0	891.0
22.5°	855.9	860.1	862.2	872.9	875.0
25°	833.5	839.9	843.1	854.8	855.9
27.5°	809.1	818.7	822.9	833.5	834.6
30°	784.6	793.1	800.6	812.3	814.4
32.5°	758.1	768.7	777.2	791.0	793.1
35°	729.4	742.1	752.7	767.6	770.8
37.5°	700.6	715.5	728.3	743.2	746.4
40°	673.0	686.8	701.7	717.7	721.9
42.5°	641.1	657.1	675.1	693.2	696.4
45°	608.1	628.3	648.5	666.6	671.9
47.5°	577.3	597.5	620.9	639.0	645.4
50°	543.3	566.7	590.1	611.3	617.7
52.5°	509.3	532.7	560.3	581.6	587.9
55°	476.3	498.6	530.5	551.8	558.2
57.5°	439.1	466.7	497.6	523.1	528.4
60°	403.0	430.6	465.7	490.1	498.6
62.5°	367.9	398.7	433.8	458.2	466.7
65°	329.6	363.6	399.8	426.3	434.8
67.5°	293.4	329.6	367.9	394.4	403.0
70°	256.2	292.4	332.8	361.5	368.9
72.5°	220.1	257.3	300.9	328.5	337.0
75°	182.9	222.2	266.9	296.6	306.2
77.5°	147.8	189.2	236.0	265.8	276.4
80°	115.9	158.4	205.2	237.1	245.6
82.5°	84.0	128.6	175.4	208.4	218.0
85°	56.3	101.0	148.8	180.7	191.4
87.5°	35.1	78.7	125.5	156.3	165.9
90°	19.3	70.0	121.8	157.1	167.1
92.5°	27.2	63.0	114.7	148.9	157.5
95°	55.1	64.7	109.0	142.2	152.6
97.5°	91.6	138.9	103.7	135.1	145.4
100°	134.8	175.9	113.8	129.8	138.0
102.5°	184.4	216.8	266.2	124.9	133.4
105°	235.6	261.3	304.4	337.8	319.3
107.5°	284.4	304.6	347.2	377.4	387.9
110°	332.8	350.0	391.7	417.7	428.4

TEST NUMBER: P1033814

CATALOG NUMBER: S124DIW-B795D770UB40-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	379.8	397.1	433.7	456.3	467.8
115°	428.3	440.1	473.4	498.3	505.7
117.5°	472.6	482.0	516.2	537.7	546.2
120°	516.6	522.8	552.8	575.6	582.6
122.5°	558.6	560.1	590.3	612.3	618.2
125°	597.4	599.3	624.4	646.8	653.9
127.5°	635.7	635.3	660.4	678.7	685.4
130°	671.4	671.0	690.3	710.2	716.6
132.5°	705.1	705.5	721.3	740.2	745.7
135°	737.8	737.1	747.6	766.1	774.0
137.5°	767.9	766.9	774.8	792.3	796.9
140°	797.1	797.6	800.1	816.2	822.3
142.5°	822.4	825.4	825.1	838.3	842.5
145°	849.4	850.6	850.6	857.7	863.4
147.5°	870.5	873.9	873.1	875.0	879.9
150°	893.7	895.6	894.9	894.9	895.6
152.5°	912.2	914.4	912.9	914.4	913.7
155°	930.2	930.9	928.7	931.7	929.4
157.5°	945.9	945.9	942.9	946.7	942.9
160°	959.4	957.2	956.4	960.9	956.4
162.5°	971.5	968.5	967.7	972.2	967.0
165°	981.2	977.5	977.5	983.5	976.7
167.5°	989.5	985.7	985.0	991.7	984.2
170°	996.2	991.7	992.5	998.5	991.0
172.5°	1000.7	996.2	997.0	1003.0	994.7
175°	1003.7	999.2	1000.0	1006.7	997.7
177.5°	1006.0	1000.7	1002.2	1008.2	999.2
180°	1003.7	1003.7	1003.7	1003.7	1003.7

(END OF REPORT)