

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: P1025870

Luminaire Tested: S124DIP-B795D590UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025870
REPORT IS A COMBINATION OF REPORTS P996545 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B795D590UB40-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

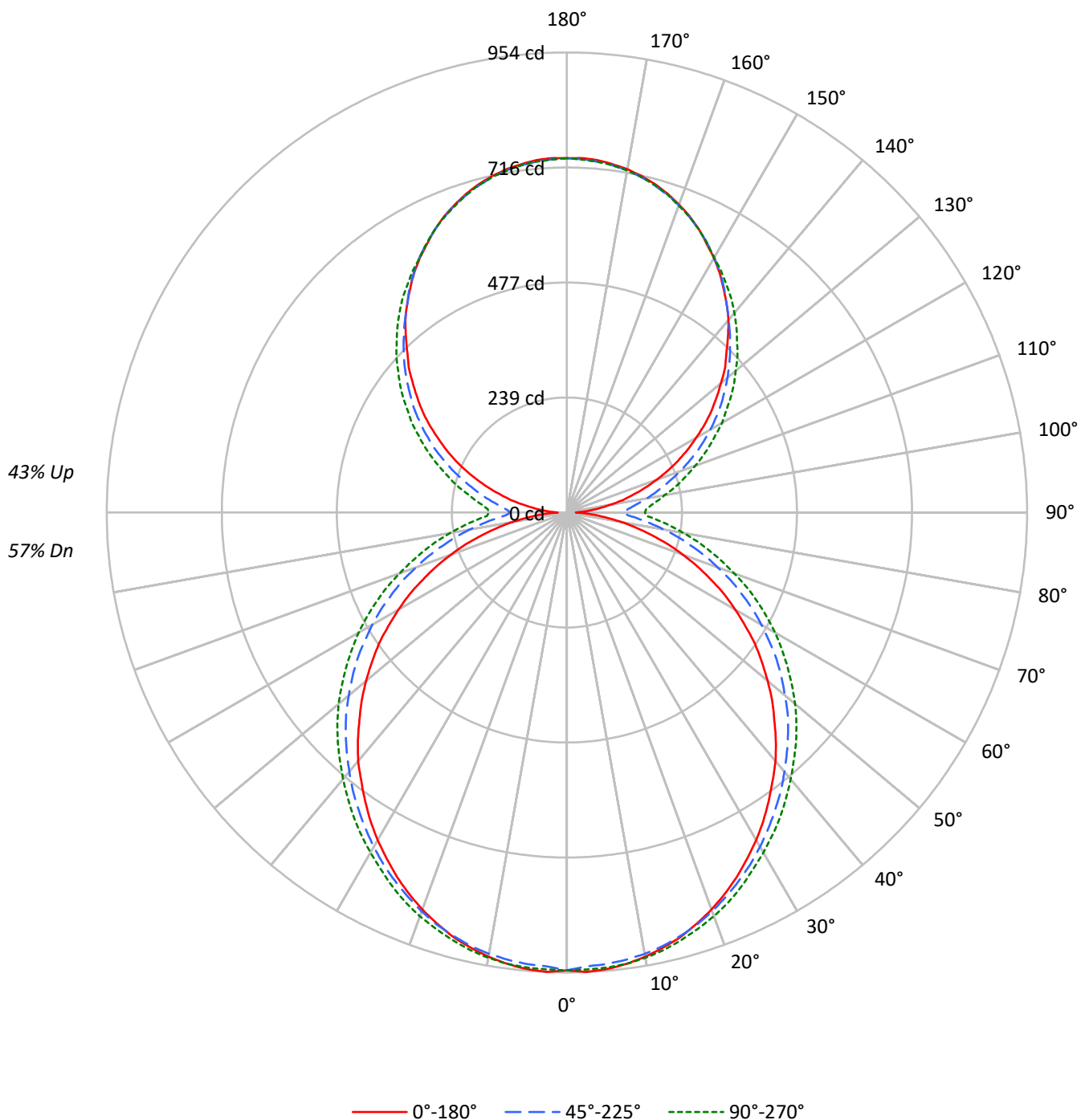
Lumens per Lamp: N/A
Luminaire Lumens: 5277.0 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 51.3
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: P1025870

CATALOG NUMBER: S124DIP-B795D590UB40-4F0-XX-W2A-D1

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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	98	93	89	85	91	87	83	80	75	72	69	64	61	59	53	52	50
2	89	81	74	68	82	75	69	64	65	60	56	55	52	49	46	44	41
3	81	71	63	56	75	66	59	53	57	51	47	48	44	41	41	37	35
4	74	62	54	47	68	58	51	45	50	44	40	43	38	35	36	33	30
5	68	55	47	40	62	52	44	38	45	39	34	38	33	30	32	29	26
6	62	50	41	35	58	46	39	33	40	34	29	35	30	26	29	25	22
7	57	45	36	31	53	42	34	29	36	30	26	31	26	23	27	23	20
8	53	41	32	27	49	38	31	26	33	27	23	29	24	20	24	21	18
9	50	37	29	24	46	35	28	23	30	25	20	26	22	18	22	19	16
10	46	34	26	21	43	32	25	20	28	22	18	24	20	16	21	17	14

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: P1025870

CATALOG NUMBER: S124DIP-B795D590UB40-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.0	1.7
10°-20°	257.7	4.9
20°-30°	389.7	7.4
30°-40°	471.5	8.9
40°-50°	498.4	9.4
50°-60°	469.1	8.9
60°-70°	389.3	7.4
70°-80°	273.2	5.2
80°-90°	155.6	2.9
90°-100°	139.6	2.6
100°-110°	211.3	4.0
110°-120°	289.2	5.5
120°-130°	347.0	6.6
130°-140°	372.0	7.1
140°-150°	356.9	6.8
150°-160°	298.4	5.7
160°-170°	198.5	3.8
170°-180°	69.5	1.3
0°-30°	737.4	14.0
0°-40°	1208.9	22.9
0°-60°	2176.5	41.2
0°-90°	2994.4	56.7
90°-120°	640.1	12.1
90°-150°	1716.1	32.5
90°-180°	2283.0	43.3
0°-180°	5277.0	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	68	118	152	162	14
95°	48	88	136	166	176	48
105°	142	164	205	234	244	151
115°	254	264	297	319	326	251
125°	365	364	390	409	414	326
135°	467	471	478	494	499	362
145°	566	568	568	574	576	355
155°	648	648	647	649	647	298
165°	705	703	702	706	703	199
175°	734	731	730	734	730	70
180°	735	735	735	735	735	

TEST NUMBER: P1025870

CATALOG NUMBER: S124DIP-B795D590UB40-4F0-XX-W2A-D1

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°	18.7	67.5	117.8	152.0	161.6
92.5°	30.7	75.4	123.9	155.3	164.5
95°	47.9	88.1	135.7	166.1	175.7
97.5°	67.3	102.7	150.8	180.7	190.3
100°	91.2	121.1	167.7	197.6	205.1
102.5°	117.4	141.4	186.3	215.6	224.7
105°	142.0	163.8	205.4	233.7	243.9
107.5°	169.8	188.4	226.3	255.0	262.0
110°	197.1	213.2	249.8	273.2	283.4

TEST NUMBER: P1025870

CATALOG NUMBER: S124DIP-B795D590UB40-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.6	238.4	272.3	295.7	304.2
115°	254.1	263.6	296.6	319.4	326.3
117.5°	282.0	288.4	319.7	340.3	347.1
120°	308.7	314.2	343.3	361.7	371.4
122.5°	337.7	338.3	366.4	386.0	390.5
125°	365.1	364.0	390.0	409.1	414.3
127.5°	390.7	391.3	411.4	429.4	436.2
130°	416.8	417.4	434.4	452.5	456.6
132.5°	444.7	444.7	456.9	473.9	479.6
135°	467.4	470.9	478.4	494.2	498.9
137.5°	494.2	494.9	500.2	514.5	520.4
140°	520.9	521.0	522.0	535.2	540.1
142.5°	544.3	545.4	543.8	555.5	559.7
145°	566.4	567.6	568.2	574.0	576.5
147.5°	589.2	590.9	590.3	590.9	594.5
150°	609.6	610.8	610.8	610.8	610.2
152.5°	627.8	629.0	629.6	631.3	629.6
155°	647.7	647.7	647.2	649.4	647.2
157.5°	664.8	663.6	663.6	665.3	663.6
160°	679.6	679.0	678.4	680.1	677.3
162.5°	693.2	691.5	690.9	694.3	691.5
165°	705.1	703.4	702.3	705.7	703.4
167.5°	714.8	712.5	712.5	715.9	712.5
170°	722.7	719.9	720.5	723.9	719.9
172.5°	728.4	726.1	726.1	730.1	726.1
175°	733.5	730.7	730.1	734.1	730.1
177.5°	735.8	733.0	733.0	736.9	732.4
180°	734.7	734.7	734.7	734.7	734.7

(END OF REPORT)