

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: P1025869

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025869
REPORT IS A COMBINATION OF REPORTS P996544 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-D
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

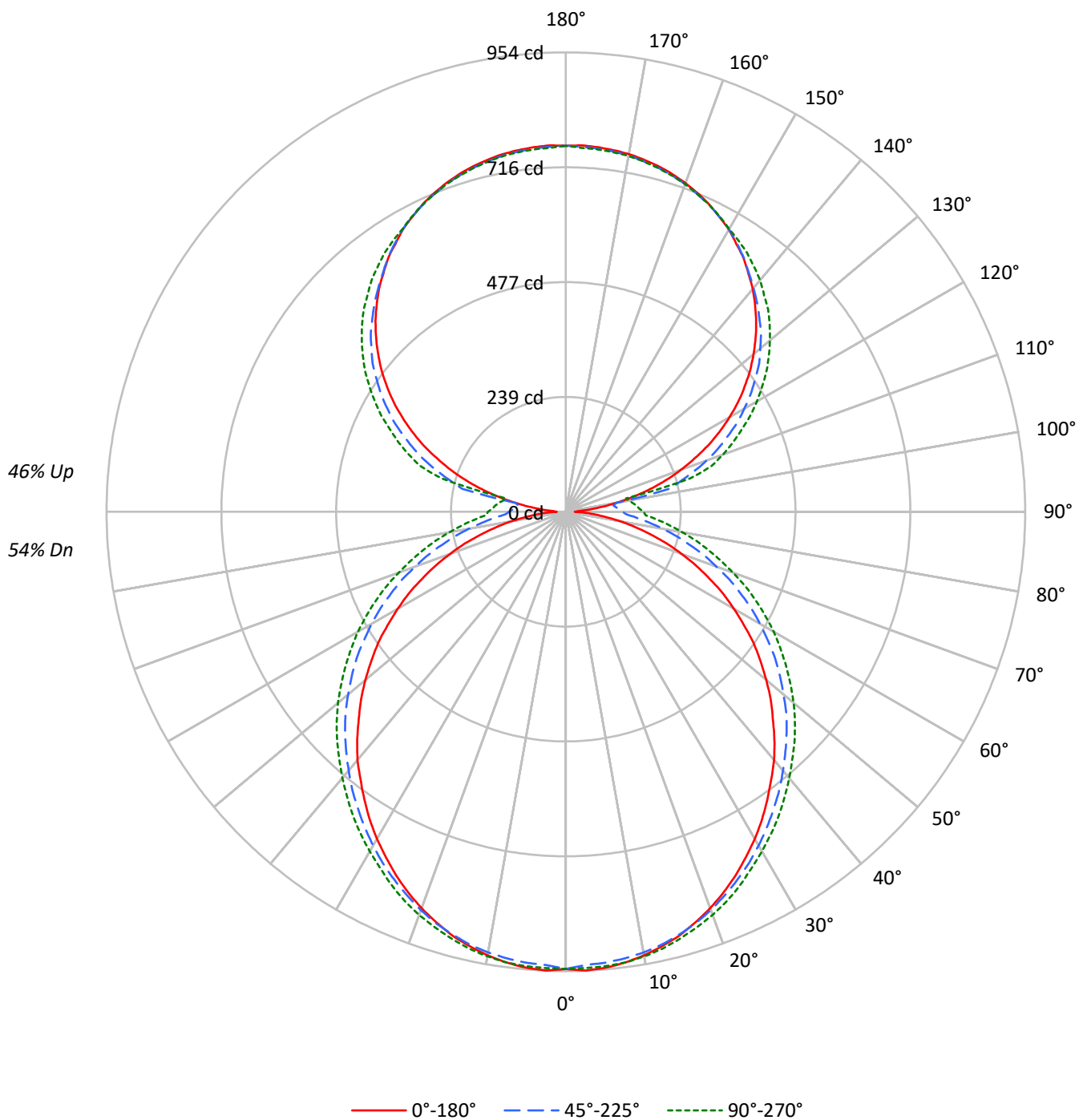
Lumens per Lamp: N/A
Luminaire Lumens: 5590.0 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59
1	98	93	88	84	90	86	82	79	73	70	68	62	60	58	51	49	48
2	88	80	74	68	81	74	69	64	63	59	55	53	50	47	44	42	40
3	80	70	62	56	74	65	58	53	56	50	46	47	43	39	39	36	33
4	73	62	54	47	67	57	50	44	49	43	39	41	37	33	34	31	28
5	67	55	46	40	62	51	44	38	44	38	33	37	32	29	31	27	24
6	62	49	41	35	57	46	38	33	39	33	29	33	29	25	28	24	21
7	57	44	36	30	53	41	34	29	36	30	25	30	26	22	25	22	19
8	53	40	32	27	49	38	30	25	32	27	22	28	23	20	23	20	17
9	49	37	29	24	46	34	27	22	30	24	20	25	21	18	21	18	15
10	46	34	26	21	43	31	25	20	27	22	18	24	19	16	20	16	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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.0	1.6
10°-20°	257.7	4.6
20°-30°	389.7	7.0
30°-40°	471.5	8.4
40°-50°	498.4	8.9
50°-60°	469.1	8.4
60°-70°	389.3	7.0
70°-80°	273.2	4.9
80°-90°	155.6	2.8
90°-100°	116.9	2.1
100°-110°	234.0	4.2
110°-120°	362.8	6.5
120°-130°	428.4	7.7
130°-140°	441.9	7.9
140°-150°	405.0	7.2
150°-160°	324.9	5.8
160°-170°	209.5	3.7
170°-180°	72.2	1.3
0°-30°	737.4	13.2
0°-40°	1208.9	21.6
0°-60°	2176.5	38.9
0°-90°	2994.5	53.6
90°-120°	713.7	12.8
90°-150°	1989.0	35.6
90°-180°	2596.0	46.4
0°-180°	5590.0	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	13
95°	45	61	105	137	147	50
105°	181	205	248	279	267	190
115°	326	337	371	395	402	321
125°	453	454	480	502	509	405
135°	559	558	568	586	594	431
145°	643	644	644	651	656	402
155°	704	705	703	705	704	325
165°	743	740	740	745	739	210
175°	760	756	757	762	755	72
180°	760	760	760	760	760	

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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	161.7
92.5°	24.4	60.6	110.8	143.9	152.5
95°	45.1	60.8	105.0	137.1	147.3
97.5°	72.5	115.8	99.7	130.1	140.3
100°	104.9	142.7	105.8	124.8	132.9
102.5°	142.4	172.6	219.9	119.6	128.1
105°	180.7	205.3	247.5	279.2	267.3
107.5°	217.6	237.3	278.6	307.9	317.7
110°	254.0	270.6	311.3	336.9	347.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	289.3	305.5	341.8	364.6	375.4
115°	325.8	337.0	370.6	395.1	402.5
117.5°	359.4	368.0	401.6	423.4	431.9
120°	392.4	397.8	428.1	450.5	457.9
122.5°	424.2	425.3	455.2	477.0	483.3
125°	453.3	454.5	479.9	501.9	508.7
127.5°	482.3	481.8	505.9	524.4	531.3
130°	509.0	508.5	527.2	547.0	553.4
132.5°	534.6	534.7	549.7	568.4	574.1
135°	559.1	558.5	568.3	586.4	594.0
137.5°	581.8	580.8	587.9	605.0	609.7
140°	604.0	604.1	606.3	621.8	627.8
142.5°	622.9	625.2	624.6	637.5	641.7
145°	643.4	644.0	644.0	650.9	656.3
147.5°	659.3	661.6	661.0	662.7	667.5
150°	676.9	678.1	677.5	677.5	678.1
152.5°	690.6	692.3	691.1	692.3	691.7
155°	704.2	704.8	703.1	705.3	703.6
157.5°	716.1	716.1	713.9	716.7	713.9
160°	726.4	724.7	724.1	727.5	724.1
162.5°	735.5	733.2	732.6	736.0	732.1
165°	742.9	740.0	740.0	744.6	739.4
167.5°	749.1	746.3	745.7	750.8	745.1
170°	754.2	750.8	751.4	755.9	750.2
172.5°	757.6	754.2	754.8	759.3	753.1
175°	759.9	756.5	757.1	762.2	755.4
177.5°	761.6	757.6	758.8	763.3	756.5
180°	759.9	759.9	759.9	759.9	759.9

(END OF REPORT)