

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: P1025879

Luminaire Tested: S124DIP-B795D590UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025879
REPORT IS A COMBINATION OF REPORTS P996554 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B795D590UB50-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

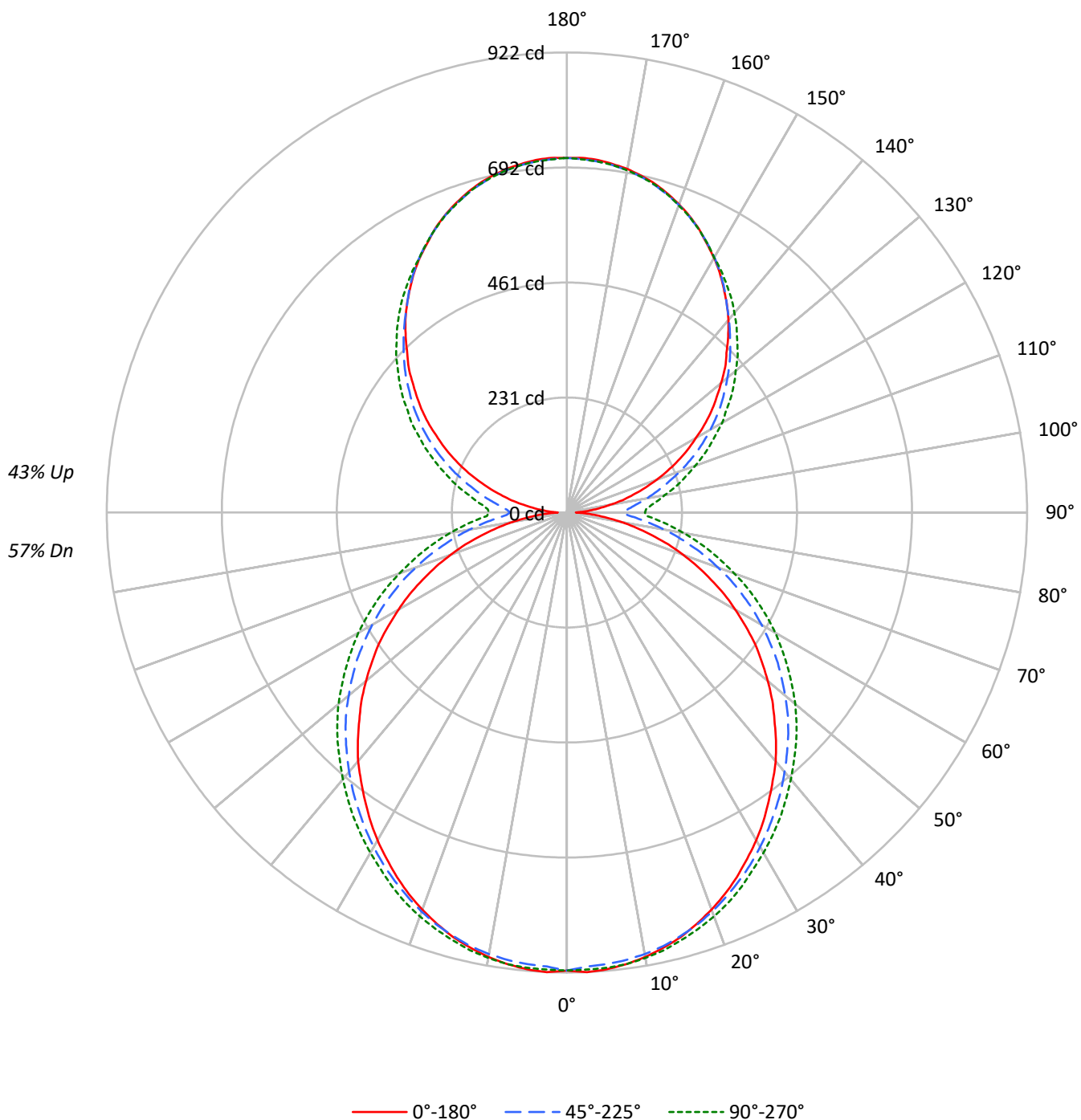
Lumens per Lamp: N/A
Luminaire Lumens: 5102.9 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1025879

CATALOG NUMBER: S124DIP-B795D590UB50-4F0-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°	7486	7486	7486
5°	7507	7291	7304
10°	7458	7147	7127
15°	7388	6986	6927
20°	7285	6812	6733
25°	7168	6619	6524
30°	7042	6428	6311
35°	6899	6234	6121
40°	6785	6046	5924
45°	6616	5870	5750
50°	6471	5671	5567
55°	6323	5478	5355
60°	6090	5239	5157
65°	5836	4980	4918
70°	5528	4686	4641
75°	5095	4357	4378
80°	4611	4024	4103
85°	3966	3687	3878

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6616 cd/sqm

TEST NUMBER: P1025879

CATALOG NUMBER: S124DIP-B795D590UB50-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.0	1.7
10°-20°	249.2	4.9
20°-30°	376.8	7.4
30°-40°	455.9	8.9
40°-50°	482.0	9.4
50°-60°	453.6	8.9
60°-70°	376.4	7.4
70°-80°	264.1	5.2
80°-90°	150.4	2.9
90°-100°	135.0	2.6
100°-110°	204.4	4.0
110°-120°	279.7	5.5
120°-130°	335.6	6.6
130°-140°	359.8	7.1
140°-150°	345.2	6.8
150°-160°	288.6	5.7
160°-170°	192.0	3.8
170°-180°	67.2	1.3
0°-30°	713.1	14.0
0°-40°	1169.0	22.9
0°-60°	2104.5	41.2
0°-90°	2895.5	56.7
90°-120°	619.0	12.1
90°-150°	1659.7	32.5
90°-180°	2207.0	43.2
0°-180°	5102.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	918	918	918	918	918	
5°	919	916	909	917	916	87
15°	881	882	879	888	887	248
25°	806	812	815	827	828	371
35°	705	718	728	742	745	442
45°	588	608	627	645	650	454
55°	461	482	513	534	540	410
65°	319	352	386	412	420	316
75°	177	215	258	287	296	188
85°	54	98	144	175	185	57
90°	18	65	114	147	156	14
95°	46	85	131	161	170	46
105°	137	158	199	226	236	146
115°	246	255	287	309	316	243
125°	353	352	377	396	401	315
135°	452	456	463	478	482	350
145°	548	549	550	555	558	343
155°	626	626	626	628	626	288
165°	682	680	679	682	680	192
175°	709	707	706	710	706	67
180°	710	710	710	710	710	

TEST NUMBER: P1025879

CATALOG NUMBER: S124DIP-B795D590UB50-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	918.0	918.0	918.0	918.0	918.0
2.5°	922.2	919.1	910.9	918.0	917.0
5°	919.1	916.0	908.8	917.0	916.0
7.5°	912.9	910.9	904.7	913.9	912.9
10°	904.7	903.7	898.5	907.8	906.7
12.5°	893.4	893.4	890.3	898.5	898.5
15°	881.0	882.1	879.0	888.2	887.2
17.5°	864.6	867.7	866.6	875.9	874.9
20°	847.1	850.2	851.2	861.5	861.5
22.5°	827.6	831.7	833.7	844.0	846.1
25°	806.0	812.2	815.2	826.6	827.6
27.5°	782.3	791.6	795.7	806.0	807.0
30°	758.7	766.9	774.1	785.4	787.5
32.5°	733.0	743.3	751.5	764.9	766.9
35°	705.2	717.6	727.9	742.3	745.3
37.5°	677.5	691.9	704.2	718.6	721.7
40°	650.8	664.1	678.5	693.9	698.0
42.5°	619.9	635.3	652.8	670.3	673.4
45°	588.0	607.6	627.1	644.6	649.7
47.5°	558.2	577.8	600.4	617.9	624.0
50°	525.3	547.9	570.6	591.1	597.3
52.5°	492.4	515.1	541.8	562.3	568.5
55°	460.6	482.2	513.0	533.6	539.7
57.5°	424.6	451.3	481.1	505.8	510.9
60°	389.6	416.4	450.3	473.9	482.2
62.5°	355.7	385.5	419.4	443.1	451.3
65°	318.7	351.6	386.5	412.2	420.5
67.5°	283.7	318.7	355.7	381.4	389.6
70°	247.8	282.7	321.8	349.5	356.7
72.5°	212.8	248.8	290.9	317.7	325.9
75°	176.8	214.9	258.0	286.8	296.1
77.5°	142.9	183.0	228.2	257.0	267.3
80°	112.1	153.2	198.4	229.3	237.5
82.5°	81.2	124.4	169.6	201.5	210.7
85°	54.5	97.7	143.9	174.8	185.0
87.5°	33.9	76.1	121.3	151.1	160.4
90°	18.0	65.3	113.9	147.0	156.3
92.5°	29.7	72.8	119.8	150.2	159.0
95°	46.4	85.2	131.2	160.6	169.8
97.5°	65.1	99.3	145.8	174.7	184.0
100°	88.2	117.1	162.2	191.1	198.3
102.5°	113.5	136.7	180.2	208.5	217.3
105°	137.3	158.4	198.7	226.0	235.9
107.5°	164.3	182.2	218.8	246.7	253.3
110°	190.6	206.1	241.6	264.1	274.0

TEST NUMBER: P1025879

CATALOG NUMBER: S124DIP-B795D590UB50-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	218.2	230.5	263.4	286.0	294.2
115°	245.8	255.0	286.8	308.8	315.5
117.5°	272.7	278.8	309.2	329.1	335.7
120°	298.5	303.8	332.0	349.8	359.1
122.5°	326.6	327.1	354.4	373.3	377.8
125°	353.0	352.0	377.2	395.6	400.7
127.5°	377.8	378.4	397.8	415.2	421.9
130°	403.2	403.8	420.2	437.6	441.6
132.5°	430.1	430.2	441.9	458.3	463.9
135°	452.2	455.5	462.7	478.0	482.5
137.5°	478.0	478.5	483.7	497.6	503.2
140°	503.8	503.8	504.9	517.7	522.3
142.5°	526.3	527.4	525.9	537.2	541.3
145°	547.8	549.0	549.5	555.2	557.6
147.5°	569.8	571.5	571.0	571.4	575.0
150°	589.5	590.7	590.7	590.7	590.2
152.5°	607.2	608.3	608.9	610.5	608.9
155°	626.5	626.5	625.9	628.1	625.9
157.5°	642.9	641.8	641.8	643.5	641.8
160°	657.2	656.7	656.1	657.8	655.0
162.5°	670.4	668.8	668.2	671.5	668.8
165°	682.0	680.3	679.2	682.5	680.3
167.5°	691.3	689.1	689.1	692.4	689.1
170°	699.0	696.3	696.8	700.1	696.3
172.5°	704.5	702.3	702.3	706.1	702.3
175°	709.4	706.7	706.1	710.0	706.1
177.5°	711.6	708.9	708.9	712.7	708.3
180°	710.5	710.5	710.5	710.5	710.5

(END OF REPORT)