

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: P1033790

Luminaire Tested: S124DIW-B795D470UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033790
REPORT IS A COMBINATION OF REPORTS P998197 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D470UB50-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

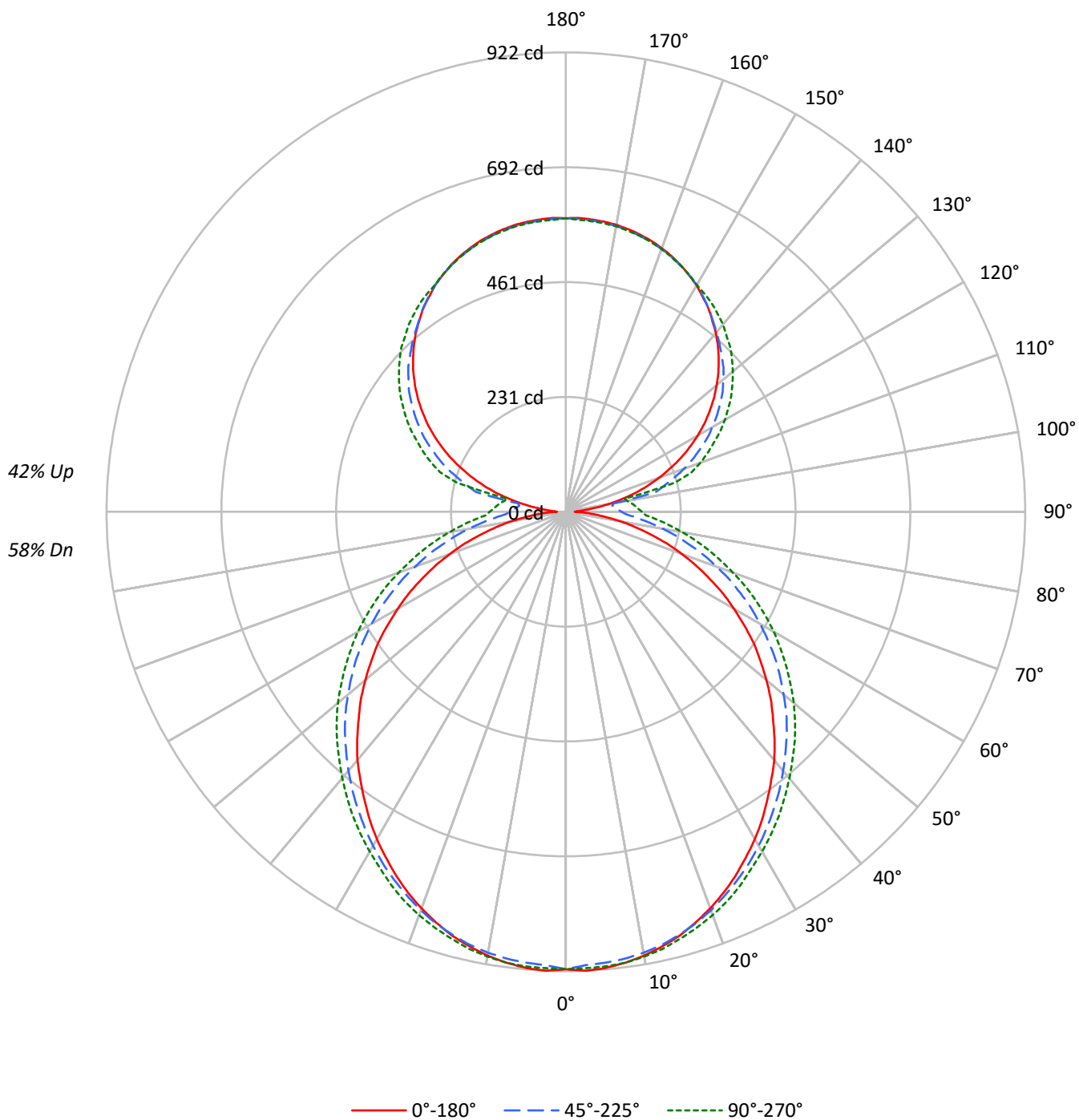
Lumens per Lamp: N/A
Luminaire Lumens: 4954.0 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 49.1
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: P1033790

CATALOG NUMBER: S124DIW-B795D470UB50-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1033790

CATALOG NUMBER: S124DIW-B795D470UB50-4F0-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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	64	64	64
1	99	94	89	85	92	87	83	80	75	73	70	65	62	60	55	53	52
2	89	81	74	69	83	76	70	65	65	61	57	56	53	50	47	45	43
3	81	71	63	57	75	66	59	53	57	52	47	49	45	41	42	38	36
4	74	62	54	48	69	58	51	45	51	45	40	44	39	35	37	33	30
5	68	56	47	41	63	52	44	38	45	39	34	39	34	30	33	29	26
6	62	50	41	35	58	47	39	33	41	34	30	35	30	26	30	26	23
7	58	45	36	31	54	42	34	29	37	31	26	32	27	23	27	23	20
8	54	41	33	27	50	38	31	26	34	27	23	29	24	21	25	21	18
9	50	37	29	24	46	35	28	23	31	25	21	27	22	18	23	19	16
10	47	34	27	22	43	32	25	21	28	23	19	25	20	17	21	18	15

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: P1033790

CATALOG NUMBER: S124DIW-B795D470UB50-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.0	1.8
10°-20°	249.2	5.0
20°-30°	376.8	7.6
30°-40°	455.9	9.2
40°-50°	482.0	9.7
50°-60°	453.6	9.2
60°-70°	376.4	7.6
70°-80°	264.1	5.3
80°-90°	150.1	3.0
90°-100°	108.2	2.2
100°-110°	194.4	3.9
110°-120°	290.0	5.9
120°-130°	337.0	6.8
130°-140°	344.7	7.0
140°-150°	314.4	6.3
150°-160°	251.8	5.1
160°-170°	162.4	3.3
170°-180°	56.0	1.1
0°-30°	713.1	14.4
0°-40°	1169.0	23.6
0°-60°	2104.5	42.5
0°-90°	2895.2	58.4
90°-120°	592.6	12.0
90°-150°	1588.6	32.1
90°-180°	2059.0	41.6
0°-180°	4954.0	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	64	112	144	153	13
95°	38	57	99	130	139	41
105°	142	165	205	235	227	149
115°	254	264	297	320	328	250
125°	352	353	378	399	405	315
135°	434	433	442	460	467	335
145°	499	499	499	506	511	312
155°	546	546	545	547	545	252
165°	576	574	574	577	573	163
175°	589	586	587	591	586	56
180°	589	589	589	589	589	

TEST NUMBER: P1033790

CATALOG NUMBER: S124DIW-B795D470UB50-4F0-XX-W2A-D

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°	17.7	63.8	111.5	143.9	153.0
92.5°	22.0	57.1	104.9	136.3	144.5
95°	37.6	56.6	99.1	129.5	139.2
97.5°	58.6	98.1	94.0	122.9	132.6
100°	83.6	118.2	97.5	117.8	125.4
102.5°	112.6	140.5	184.9	112.5	120.7
105°	141.9	165.1	205.4	235.0	227.4
107.5°	170.6	189.3	228.4	256.3	265.2
110°	198.5	214.3	252.9	277.4	287.0

TEST NUMBER: P1033790

CATALOG NUMBER: S124DIW-B795D470UB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.7	240.7	275.6	297.7	307.7
115°	253.8	264.3	296.8	320.3	327.5
117.5°	279.8	287.7	319.9	341.0	349.2
120°	305.1	310.0	339.4	360.8	368.2
122.5°	329.8	330.7	359.4	380.4	386.7
125°	352.2	352.9	377.7	398.6	405.2
127.5°	374.6	374.1	396.8	414.8	421.6
130°	395.2	394.7	412.4	431.3	437.5
132.5°	415.1	414.9	429.0	446.9	452.6
135°	433.9	433.4	442.4	459.7	466.8
137.5°	451.5	450.4	456.7	473.1	477.7
140°	468.7	468.5	470.4	485.1	490.7
142.5°	483.0	484.8	484.2	496.4	500.5
145°	498.9	499.2	499.2	505.8	510.8
147.5°	511.2	512.8	512.4	513.8	518.4
150°	524.9	525.6	525.2	525.2	525.6
152.5°	535.3	536.6	535.8	536.6	536.2
155°	545.9	546.3	545.0	546.8	545.4
157.5°	555.1	555.1	553.4	555.6	553.4
160°	563.1	561.8	561.3	564.0	561.3
162.5°	570.1	568.4	567.9	570.6	567.5
165°	575.9	573.6	573.6	577.2	573.2
167.5°	580.7	578.5	578.1	582.0	577.6
170°	584.7	582.0	582.5	586.0	581.6
172.5°	587.3	584.7	585.1	588.6	583.8
175°	589.1	586.4	586.9	590.8	585.5
177.5°	590.4	587.3	588.2	591.7	586.4
180°	589.1	589.1	589.1	589.1	589.1

(END OF REPORT)