

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: P1033778

Luminaire Tested: S124DIW-B795D470UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033778
REPORT IS A COMBINATION OF REPORTS P998179 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D470UB35-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

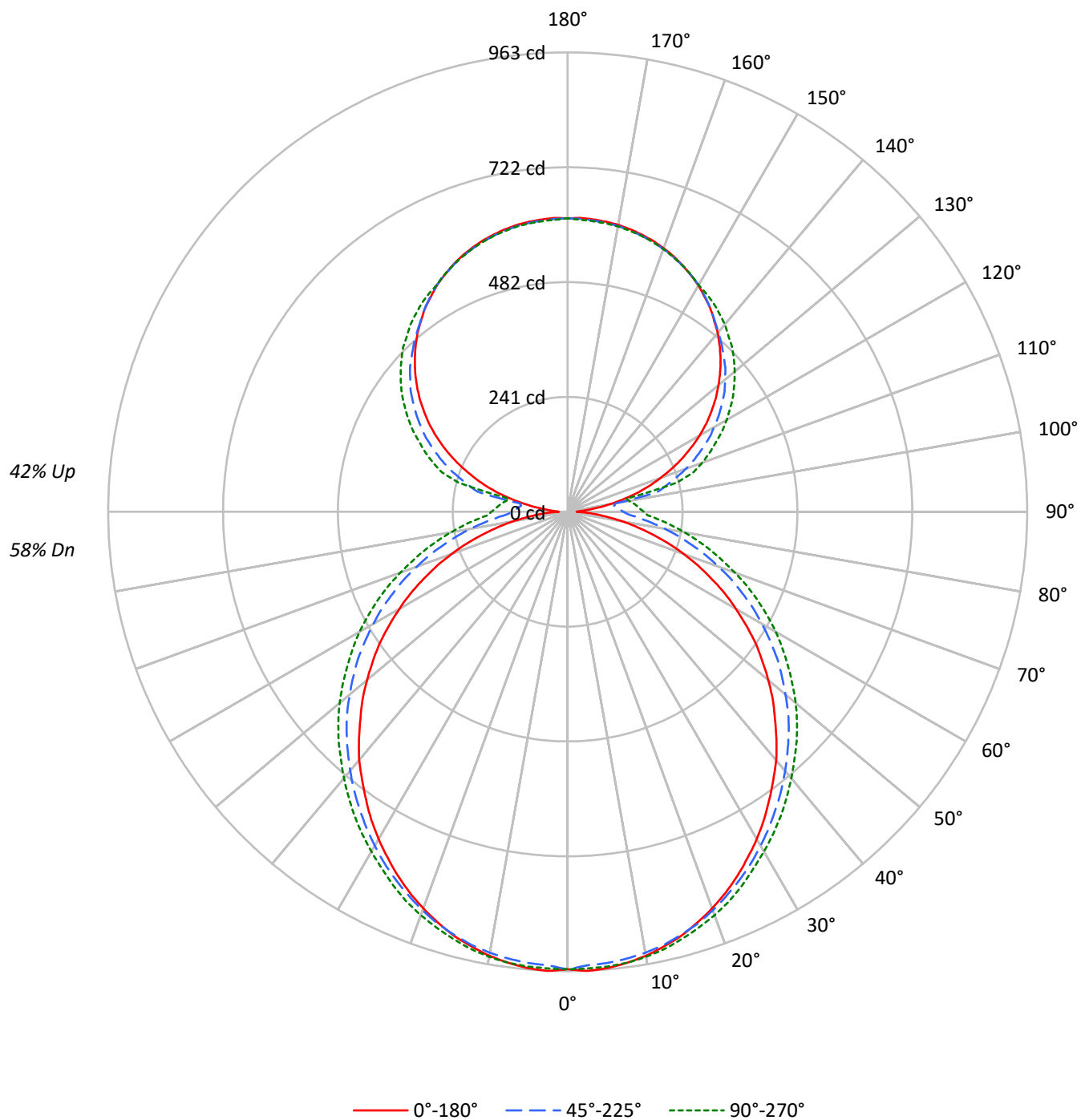
Lumens per Lamp: N/A
Luminaire Lumens: 5175.0 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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

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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	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°	7821	7821	7821
5°	7843	7617	7631
10°	7791	7467	7446
15°	7718	7299	7237
20°	7611	7116	7034
25°	7489	6915	6816
30°	7357	6715	6593
35°	7208	6512	6395
40°	7089	6317	6190
45°	6911	6133	6008
50°	6761	5924	5816
55°	6605	5723	5595
60°	6364	5473	5387
65°	6097	5203	5138
70°	5774	4896	4849
75°	5323	4553	4573
80°	4816	4204	4286
85°	4141	3854	4052

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6911 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.9	1.8
10°-20°	260.4	5.0
20°-30°	393.7	7.6
30°-40°	476.3	9.2
40°-50°	503.5	9.7
50°-60°	473.9	9.2
60°-70°	393.2	7.6
70°-80°	276.0	5.3
80°-90°	156.8	3.0
90°-100°	113.0	2.2
100°-110°	203.1	3.9
110°-120°	302.8	5.9
120°-130°	351.9	6.8
130°-140°	360.0	7.0
140°-150°	328.4	6.3
150°-160°	263.0	5.1
160°-170°	169.6	3.3
170°-180°	58.5	1.1
0°-30°	744.9	14.4
0°-40°	1221.2	23.6
0°-60°	2198.6	42.5
0°-90°	3024.7	58.4
90°-120°	618.9	12.0
90°-150°	1659.2	32.1
90°-180°	2150.0	41.5
0°-180°	5175.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	959	959	959	959	959	
5°	960	957	949	958	957	91
15°	920	922	918	928	927	259
25°	842	848	852	864	865	388
35°	737	750	760	776	779	461
45°	614	635	655	673	679	475
55°	481	504	536	557	564	429
65°	333	367	404	431	439	330
75°	185	224	270	300	309	196
85°	57	102	150	183	193	59
90°	19	66	116	150	160	13
95°	39	59	104	135	145	42
105°	148	172	214	245	237	156
115°	265	276	310	334	342	261
125°	368	369	394	416	423	329
135°	453	453	462	480	488	349
145°	521	521	521	528	533	326
155°	570	571	569	571	570	263
165°	601	599	599	603	599	170
175°	615	612	613	617	612	59
180°	615	615	615	615	615	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	959.1	959.1	959.1	959.1	959.1
2.5°	963.4	960.2	951.6	959.1	958.0
5°	960.2	957.0	949.4	958.0	957.0
7.5°	953.7	951.6	945.1	954.8	953.7
10°	945.1	944.1	938.7	948.4	947.3
12.5°	933.3	933.3	930.1	938.7	938.7
15°	920.4	921.5	918.3	928.0	926.9
17.5°	903.3	906.5	905.4	915.1	914.0
20°	885.0	888.2	889.3	900.0	900.0
22.5°	864.6	868.9	871.0	881.8	883.9
25°	842.0	848.5	851.7	863.5	864.6
27.5°	817.3	827.0	831.3	842.0	843.1
30°	792.6	801.2	808.7	820.6	822.7
32.5°	765.8	776.5	785.1	799.1	801.2
35°	736.8	749.7	760.4	775.5	778.7
37.5°	707.8	722.8	735.7	750.7	754.0
40°	679.9	693.8	708.9	725.0	729.3
42.5°	647.6	663.8	682.0	700.3	703.5
45°	614.3	634.8	655.2	673.4	678.8
47.5°	583.2	603.6	627.2	645.5	651.9
50°	548.8	572.5	596.1	617.6	624.0
52.5°	514.5	538.1	566.0	587.5	593.9
55°	481.2	503.7	535.9	557.4	563.9
57.5°	443.6	471.5	502.6	528.4	533.8
60°	407.1	435.0	470.4	495.1	503.7
62.5°	371.6	402.8	438.2	462.9	471.5
65°	332.9	367.3	403.8	430.7	439.3
67.5°	296.4	332.9	371.6	398.5	407.1
70°	258.8	295.4	336.2	365.2	372.7
72.5°	222.3	259.9	304.0	331.9	340.5
75°	184.7	224.5	269.6	299.7	309.3
77.5°	149.3	191.2	238.4	268.5	279.2
80°	117.1	160.0	207.3	239.5	248.1
82.5°	84.8	130.0	177.2	210.5	220.2
85°	56.9	102.0	150.4	182.6	193.3
87.5°	35.4	79.5	126.7	157.9	167.5
90°	18.6	66.5	116.4	150.4	159.9
92.5°	23.0	59.7	109.6	142.4	151.0
95°	39.3	59.1	103.5	135.3	145.4
97.5°	61.2	102.4	98.2	128.4	138.6
100°	87.3	123.4	101.8	123.0	131.0
102.5°	117.6	146.8	193.2	117.5	126.1
105°	148.2	172.4	214.5	245.4	237.4
107.5°	178.1	197.7	238.5	267.7	277.1
110°	207.4	223.8	264.1	289.7	299.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	235.7	251.4	287.7	311.0	321.4
115°	265.0	276.1	310.0	334.5	342.0
117.5°	292.2	300.5	334.1	356.2	364.8
120°	318.8	323.8	354.4	376.9	384.5
122.5°	344.5	345.5	375.4	397.2	403.9
125°	367.8	368.6	394.5	416.3	423.2
127.5°	391.3	390.7	414.5	433.3	440.4
130°	412.7	412.1	430.7	450.5	456.9
132.5°	433.4	433.3	448.0	466.8	472.7
135°	453.1	452.6	462.0	480.2	487.5
137.5°	471.5	470.5	477.1	494.1	499.0
140°	489.4	489.3	491.2	506.6	512.5
142.5°	504.5	506.4	505.7	518.4	522.7
145°	521.1	521.4	521.4	528.2	533.4
147.5°	534.0	535.6	535.2	536.7	541.5
150°	548.2	549.0	548.5	548.5	549.0
152.5°	559.1	560.5	559.5	560.5	560.0
155°	570.1	570.6	569.2	571.1	569.7
157.5°	579.8	579.8	578.0	580.3	578.0
160°	588.1	586.7	586.2	589.0	586.2
162.5°	595.4	593.6	593.1	595.9	592.7
165°	601.4	599.1	599.1	602.8	598.7
167.5°	606.5	604.2	603.7	607.9	603.3
170°	610.6	607.9	608.3	612.0	607.4
172.5°	613.4	610.6	611.1	614.8	609.7
175°	615.2	612.5	612.9	617.1	611.5
177.5°	616.6	613.4	614.3	618.0	612.5
180°	615.2	615.2	615.2	615.2	615.2

(END OF REPORT)