

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: P1033779

Luminaire Tested: S124DIW-B795D470UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033779
REPORT IS A COMBINATION OF REPORTS P998180 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D470UB35-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

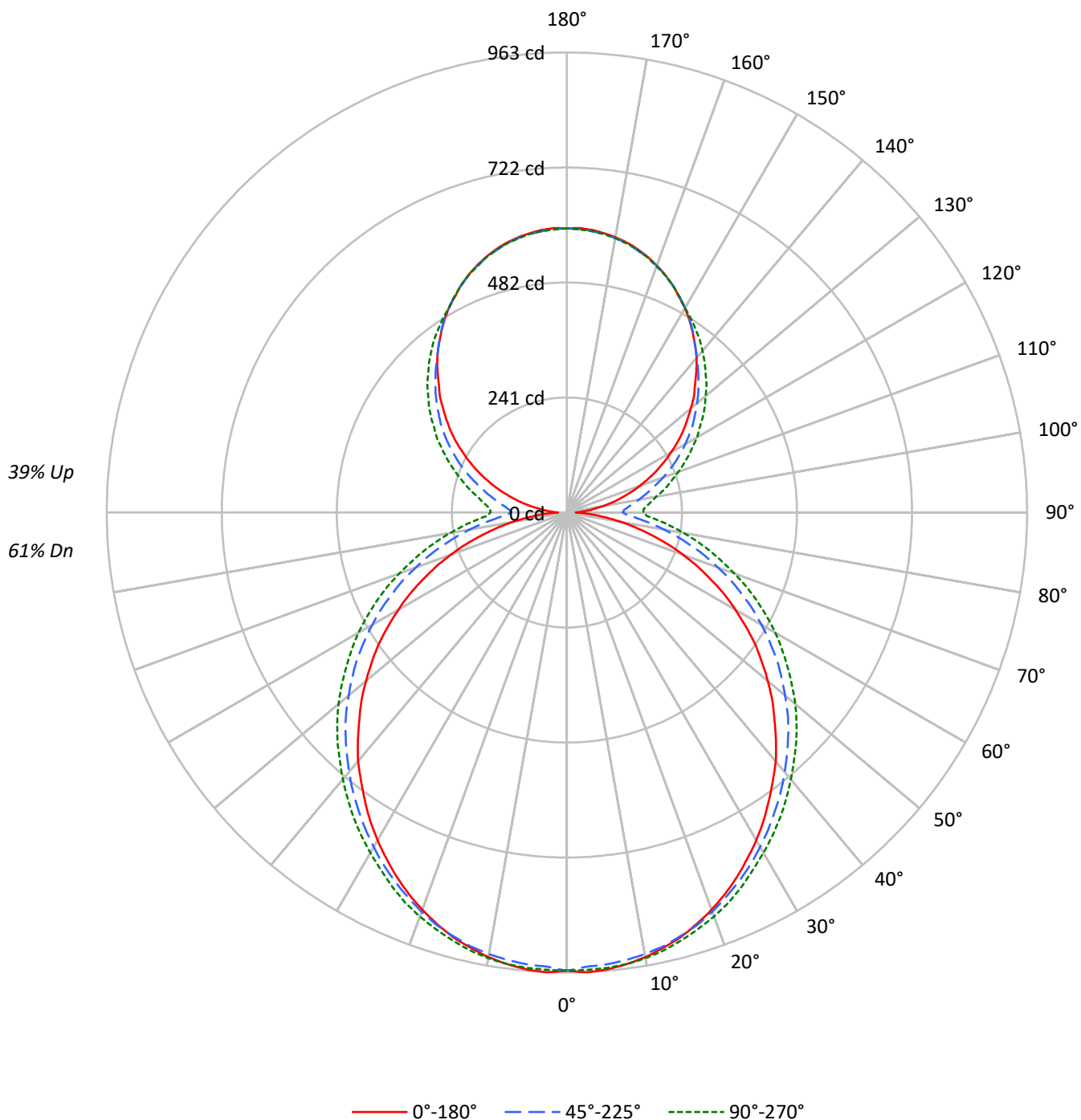
Lumens per Lamp: N/A
Luminaire Lumens: 4922.0 lumens
Efficiency: N/A
Efficacy: 100.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	99	94	90	86	92	88	84	81	77	74	71	67	64	62	57	55	54
2	90	82	75	69	84	76	70	65	67	62	58	58	54	51	49	47	44
3	82	71	63	57	76	67	60	54	58	53	48	51	46	43	43	40	37
4	74	63	54	48	69	59	51	45	52	46	41	45	40	36	38	35	32
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	35	31	27
6	63	50	41	35	58	47	39	34	41	35	30	36	31	27	31	27	24
7	58	45	37	31	54	42	35	29	37	31	27	33	28	24	28	24	21
8	54	41	33	27	50	39	31	26	34	28	24	30	25	21	26	22	19
9	50	37	30	24	47	35	28	23	31	25	21	28	23	19	24	20	17
10	47	34	27	22	44	32	25	21	29	23	19	25	21	17	22	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	5.3
20°-30°	393.7	8.0
30°-40°	476.3	9.7
40°-50°	503.5	10.2
50°-60°	473.9	9.6
60°-70°	393.2	8.0
70°-80°	276.0	5.6
80°-90°	156.8	3.2
90°-100°	131.4	2.7
100°-110°	184.7	3.8
110°-120°	243.3	4.9
120°-130°	286.2	5.8
130°-140°	303.5	6.2
140°-150°	289.5	5.9
150°-160°	241.6	4.9
160°-170°	160.8	3.3
170°-180°	56.3	1.1
0°-30°	744.9	15.1
0°-40°	1221.2	24.8
0°-60°	2198.6	44.7
0°-90°	3024.7	61.5
90°-120°	559.5	11.4
90°-150°	1438.6	29.2
90°-180°	1897.0	38.5
0°-180°	4922.0	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	14
95°	42	81	128	159	168	41
105°	117	139	180	209	219	125
115°	207	217	250	273	280	205
125°	296	295	322	341	347	265
135°	379	382	389	406	411	293
145°	459	460	460	466	469	287
155°	524	524	524	526	524	241
165°	571	570	569	572	570	161
175°	594	592	591	594	591	56
180°	595	595	595	595	595	

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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°	28.1	71.6	120.1	151.6	160.7
95°	41.6	81.1	128.4	158.7	168.4
97.5°	57.1	91.9	139.6	169.4	179.1
100°	76.2	106.0	152.0	181.9	189.4
102.5°	97.4	121.4	166.0	195.3	204.4
105°	116.9	138.8	180.4	208.6	218.6
107.5°	139.5	158.1	196.2	224.9	232.0
110°	161.4	177.3	214.4	238.2	248.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	184.2	197.1	231.6	255.3	263.9
115°	207.0	216.7	250.2	273.3	280.4
117.5°	229.6	236.1	267.8	289.0	296.2
120°	251.1	256.1	285.9	305.1	314.6
122.5°	274.6	275.0	303.6	323.6	328.9
125°	296.5	295.4	321.8	341.3	346.8
127.5°	317.2	317.5	338.0	356.4	363.6
130°	338.2	338.4	355.6	374.1	378.7
132.5°	360.7	360.5	373.0	390.4	396.3
135°	378.9	381.7	389.3	405.6	410.6
137.5°	400.6	400.9	406.2	420.9	426.7
140°	422.2	422.1	423.1	436.7	441.6
142.5°	441.0	441.9	440.3	452.1	456.4
145°	458.9	459.7	460.1	466.1	469.0
147.5°	477.3	478.5	478.1	478.7	482.5
150°	493.9	494.6	494.6	494.6	494.2
152.5°	508.4	509.4	509.8	511.2	509.8
155°	524.5	524.5	524.1	525.9	524.1
157.5°	538.3	537.4	537.4	538.8	537.4
160°	550.3	549.8	549.4	550.8	548.5
162.5°	561.3	560.0	559.5	562.3	560.0
165°	571.0	569.6	568.7	571.5	569.6
167.5°	578.8	577.0	577.0	579.8	577.0
170°	585.3	583.0	583.4	586.2	583.0
172.5°	589.9	588.0	588.0	591.3	588.0
175°	594.0	591.7	591.3	594.5	591.3
177.5°	595.9	593.6	593.6	596.8	593.1
180°	594.9	594.9	594.9	594.9	594.9

(END OF REPORT)