

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: P1033337

Luminaire Tested: S124DIW-B1195D470UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033337
REPORT IS A COMBINATION OF REPORTS P997189 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D470UB35-4F0-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

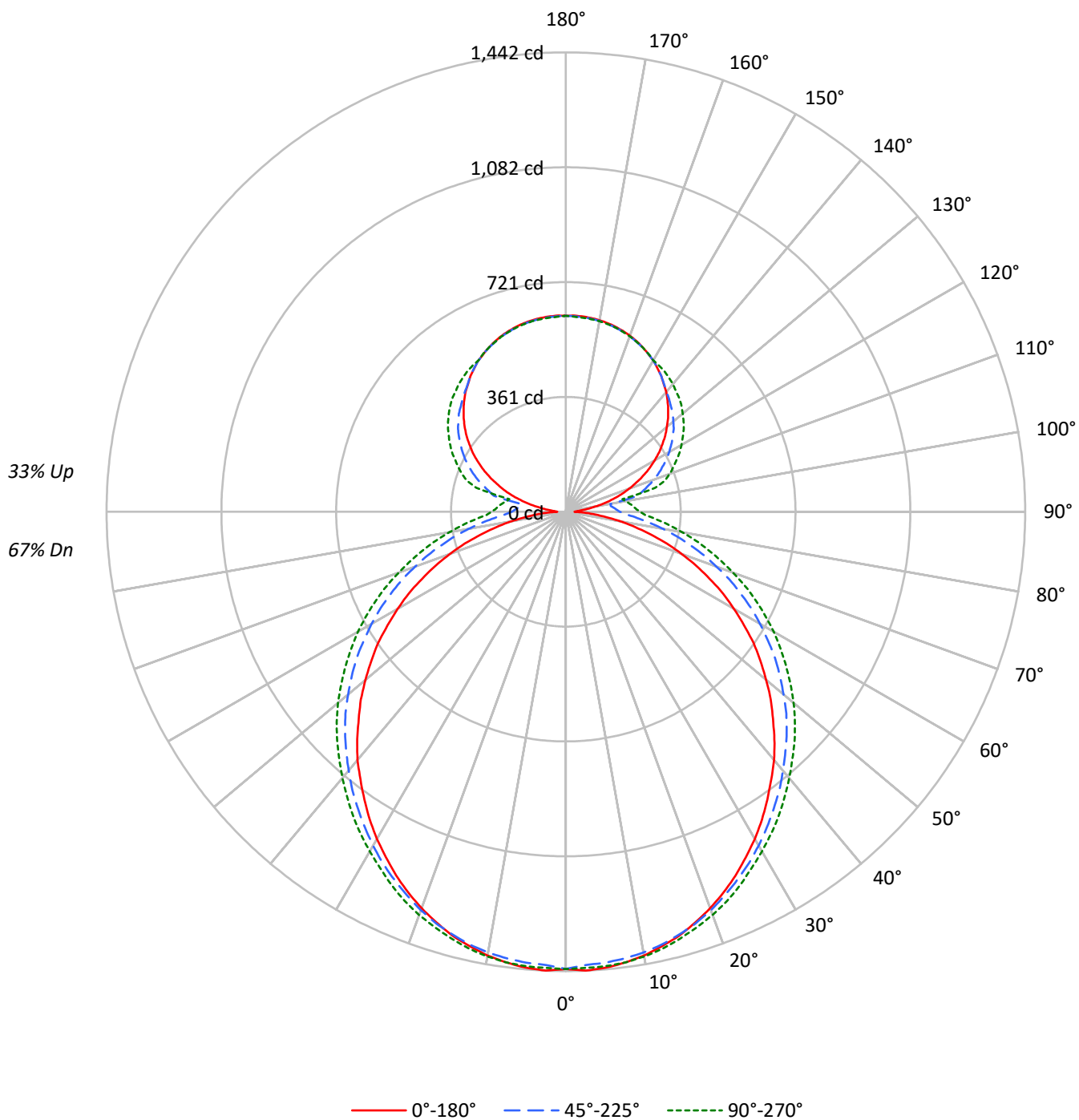
Lumens per Lamp: N/A
Luminaire Lumens: 6798.0 lumens
Efficiency: N/A
Efficacy: 91.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.5
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	111	111	111	111	105	105	105	105	93	93	93	81	81	81	71	71	71
1	100	95	91	87	94	90	86	82	79	76	73	70	67	65	61	59	58
2	91	82	75	70	85	78	71	66	69	64	60	60	57	53	53	50	47
3	82	72	64	57	77	68	61	55	60	54	50	53	48	45	46	43	40
4	75	63	55	48	70	60	52	46	53	47	42	47	42	38	41	37	34
5	69	56	48	41	64	53	45	39	47	41	36	42	37	33	37	33	29
6	63	51	42	36	59	48	40	34	43	36	31	38	33	28	33	29	26
7	59	46	37	31	55	43	35	30	39	32	27	34	29	25	30	26	23
8	54	41	33	28	51	39	32	26	35	29	24	31	26	22	28	24	20
9	51	38	30	25	48	36	29	24	32	26	22	29	24	20	26	21	18
10	47	35	27	22	45	33	26	21	30	24	20	27	22	18	24	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11702	11702	11702
5°	11735	11398	11418
10°	11659	11173	11142
15°	11550	10922	10829
20°	11388	10649	10526
25°	11206	10347	10199
30°	11008	10049	9865
35°	10786	9744	9569
40°	10607	9452	9261
45°	10343	9176	8989
50°	10116	8864	8702
55°	9883	8564	8372
60°	9521	8190	8061
65°	9124	7787	7687
70°	8641	7325	7256
75°	7965	6812	6843
80°	7206	6291	6412
85°	6200	5766	6064

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10343 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.0	2.0
10°-20°	389.6	5.7
20°-30°	589.1	8.7
30°-40°	712.7	10.5
40°-50°	753.4	11.1
50°-60°	709.1	10.4
60°-70°	588.4	8.7
70°-80°	412.9	6.1
80°-90°	234.1	3.4
90°-100°	159.0	2.3
100°-110°	237.1	3.5
110°-120°	325.7	4.8
120°-130°	364.8	5.4
130°-140°	365.5	5.4
140°-150°	329.4	4.8
150°-160°	263.0	3.9
160°-170°	169.6	2.5
170°-180°	58.5	0.9
0°-30°	1114.7	16.4
0°-40°	1827.4	26.9
0°-60°	3289.9	48.4
0°-90°	4525.3	66.6
90°-120°	721.8	10.6
90°-150°	1781.6	26.2
90°-180°	2273.0	33.4
0°-180°	6798.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1435	1435	1435	1435	1435	
5°	1437	1432	1421	1434	1432	136
15°	1377	1379	1374	1388	1387	388
25°	1260	1270	1274	1292	1294	580
35°	1102	1122	1138	1160	1165	690
45°	919	950	980	1008	1016	710
55°	720	754	802	834	844	642
65°	498	550	604	644	657	494
75°	276	336	403	448	463	294
85°	85	153	225	273	289	89
90°	27	96	169	219	232	19
95°	46	84	150	196	211	48
105°	153	188	250	294	290	161
115°	268	284	335	371	382	265
125°	370	370	409	441	452	331
135°	454	454	467	494	504	350
145°	522	521	521	531	539	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°	1435.1	1435.1	1435.1	1435.1	1435.1
2.5°	1441.6	1436.8	1423.9	1435.1	1433.5
5°	1436.8	1431.9	1420.7	1433.5	1431.9
7.5°	1427.1	1423.9	1414.3	1428.7	1427.1
10°	1414.3	1412.6	1404.6	1419.1	1417.5
12.5°	1396.6	1396.6	1391.8	1404.6	1404.6
15°	1377.3	1378.9	1374.1	1388.5	1386.9
17.5°	1351.6	1356.4	1354.8	1369.3	1367.6
20°	1324.3	1329.1	1330.7	1346.8	1346.8
22.5°	1293.7	1300.1	1303.4	1319.4	1322.6
25°	1260.0	1269.6	1274.4	1292.1	1293.7
27.5°	1223.0	1237.5	1243.9	1260.0	1261.6
30°	1186.0	1198.9	1210.2	1227.8	1231.0
32.5°	1145.9	1161.9	1174.8	1195.7	1198.9
35°	1102.5	1121.8	1137.8	1160.3	1165.2
37.5°	1059.1	1081.6	1100.9	1123.4	1128.2
40°	1017.3	1038.2	1060.7	1084.8	1091.2
42.5°	969.1	993.2	1020.5	1047.8	1052.7
45°	919.3	949.8	980.3	1007.7	1015.7
47.5°	872.7	903.2	938.5	965.9	975.5
50°	821.2	856.6	891.9	924.1	933.7
52.5°	769.8	805.2	846.9	879.1	888.7
55°	720.0	753.7	801.9	834.1	843.7
57.5°	663.7	705.5	752.1	790.7	798.7
60°	609.1	650.9	703.9	740.9	753.7
62.5°	556.1	602.7	655.7	692.7	705.5
65°	498.2	549.6	604.3	644.4	657.3
67.5°	443.6	498.2	556.1	596.2	609.1
70°	387.3	442.0	503.0	546.4	557.7
72.5°	332.7	388.9	454.8	496.6	509.5
75°	276.4	335.9	403.4	448.4	462.8
77.5°	223.4	286.1	356.8	401.8	417.8
80°	175.2	239.5	310.2	358.4	371.2
82.5°	127.0	194.5	265.2	315.0	329.5
85°	85.2	152.7	225.0	273.2	289.3
87.5°	53.0	118.9	189.6	236.2	250.7
90°	27.1	96.4	169.2	218.6	232.4
92.5°	31.0	86.4	159.2	206.9	219.7
95°	46.2	83.6	149.9	196.1	211.0
97.5°	67.6	124.3	141.9	186.0	200.9
100°	93.2	143.2	142.3	177.9	189.7
102.5°	123.5	164.4	231.0	169.2	182.0
105°	153.0	187.9	249.7	293.9	290.2
107.5°	182.9	211.6	271.0	313.5	326.7
110°	211.7	235.6	294.5	332.4	346.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	239.4	261.5	315.5	350.4	365.1
115°	268.2	284.1	335.0	371.3	382.5
117.5°	295.4	306.9	356.5	389.7	402.6
120°	321.4	328.1	374.2	407.3	419.2
122.5°	347.1	348.1	392.4	425.0	435.3
125°	369.9	370.2	409.4	441.3	451.5
127.5°	393.4	392.3	426.8	455.2	465.9
130°	414.3	413.2	440.3	469.7	479.3
132.5°	435.0	434.4	455.5	483.3	492.5
135°	454.2	453.7	466.8	493.5	504.0
137.5°	472.6	471.0	479.7	504.7	512.3
140°	490.5	489.8	492.3	514.6	523.1
142.5°	505.0	506.9	505.7	524.3	530.7
145°	521.6	521.4	521.4	531.4	538.8
147.5°	534.5	535.6	535.2	537.2	544.1
150°	548.7	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)