

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: P1033343

Luminaire Tested: S124DIW-B1195D470UB40-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033343
REPORT IS A COMBINATION OF REPORTS P997198 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D470UB40-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

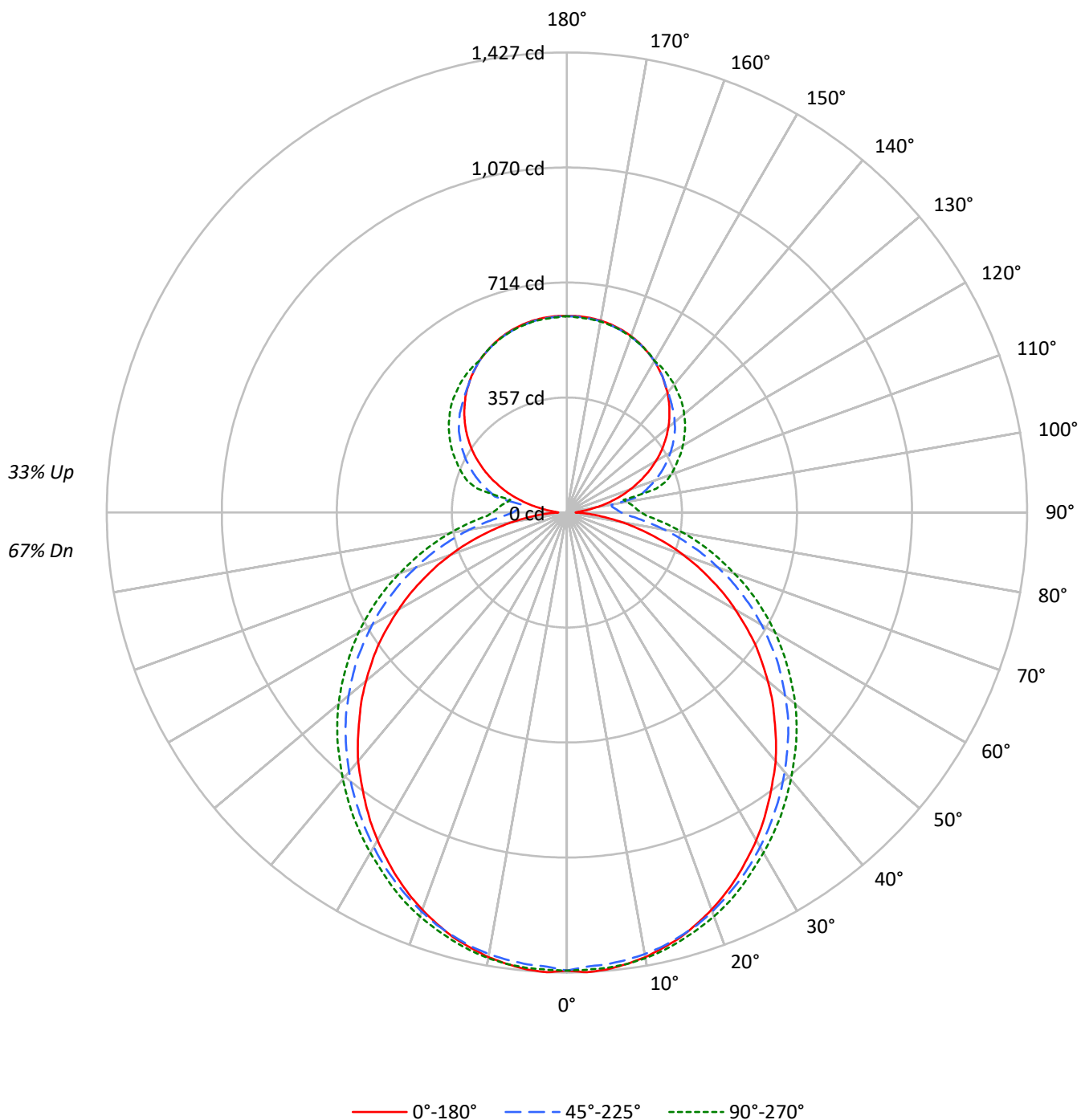
Lumens per Lamp: N/A
Luminaire Lumens: 6731.0 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	11588	11588	11588
5°	11620	11286	11307
10°	11545	11064	11033
15°	11437	10814	10723
20°	11277	10544	10422
25°	11096	10246	10099
30°	10901	9951	9769
35°	10681	9649	9474
40°	10502	9359	9170
45°	10241	9087	8901
50°	10018	8778	8617
55°	9786	8480	8290
60°	9428	8109	7982
65°	9034	7709	7612
70°	8556	7253	7184
75°	7887	6745	6776
80°	7136	6228	6350
85°	6134	5709	6003

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10241 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.6	2.0
10°-20°	385.8	5.7
20°-30°	583.3	8.7
30°-40°	705.7	10.5
40°-50°	746.0	11.1
50°-60°	702.1	10.4
60°-70°	582.6	8.7
70°-80°	408.9	6.1
80°-90°	231.8	3.4
90°-100°	157.5	2.3
100°-110°	234.8	3.5
110°-120°	322.4	4.8
120°-130°	361.2	5.4
130°-140°	361.9	5.4
140°-150°	326.2	4.8
150°-160°	260.4	3.9
160°-170°	167.9	2.5
170°-180°	57.9	0.9
0°-30°	1103.7	16.4
0°-40°	1809.5	26.9
0°-60°	3257.6	48.4
0°-90°	4480.9	66.6
90°-120°	714.7	10.6
90°-150°	1763.9	26.2
90°-180°	2250.0	33.4
0°-180°	6731.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1421	1421	1421	1421	1421	
5°	1423	1418	1407	1420	1418	135
15°	1364	1365	1361	1375	1373	384
25°	1248	1257	1262	1279	1281	575
35°	1092	1111	1127	1149	1154	684
45°	910	940	971	998	1006	704
55°	713	746	794	826	836	635
65°	493	544	598	638	651	489
75°	274	333	399	444	458	291
85°	84	151	223	270	286	88
90°	27	96	168	216	230	19
95°	46	83	148	194	209	47
105°	151	186	247	291	287	160
115°	266	281	332	368	379	262
125°	366	366	405	437	447	328
135°	450	449	462	488	499	347
145°	516	516	516	526	533	323
155°	564	565	564	565	564	260
165°	595	593	593	597	593	168
175°	609	606	607	611	605	58
180°	609	609	609	609	609	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1421.1	1421.1	1421.1	1421.1	1421.1
2.5°	1427.4	1422.7	1409.9	1421.1	1419.5
5°	1422.7	1417.9	1406.7	1419.5	1417.9
7.5°	1413.1	1409.9	1400.4	1414.7	1413.1
10°	1400.4	1398.8	1390.8	1405.2	1403.6
12.5°	1382.9	1382.9	1378.1	1390.8	1390.8
15°	1363.8	1365.4	1360.6	1374.9	1373.3
17.5°	1338.3	1343.1	1341.5	1355.8	1354.2
20°	1311.3	1316.0	1317.6	1333.5	1333.5
22.5°	1281.0	1287.4	1290.6	1306.5	1309.7
25°	1247.6	1257.2	1261.9	1279.4	1281.0
27.5°	1211.0	1225.3	1231.7	1247.6	1249.2
30°	1174.4	1187.1	1198.3	1215.8	1219.0
32.5°	1134.6	1150.5	1163.3	1184.0	1187.1
35°	1091.7	1110.8	1126.7	1148.9	1153.7
37.5°	1048.7	1071.0	1090.1	1112.3	1117.1
40°	1007.3	1028.0	1050.3	1074.2	1080.5
42.5°	959.6	983.4	1010.5	1037.6	1042.3
45°	910.2	940.5	970.7	997.8	1005.7
47.5°	864.1	894.3	929.3	956.4	965.9
50°	813.2	848.2	883.2	915.0	924.6
52.5°	762.3	797.3	838.6	870.5	880.0
55°	712.9	746.3	794.1	825.9	835.5
57.5°	657.2	698.6	744.7	782.9	790.9
60°	603.1	644.5	697.0	733.6	746.3
62.5°	550.6	596.8	649.3	685.9	698.6
65°	493.3	544.2	598.3	638.1	650.9
67.5°	439.2	493.3	550.6	590.4	603.1
70°	383.5	437.6	498.1	541.1	552.2
72.5°	329.4	385.1	450.3	491.7	504.5
75°	273.7	332.6	399.4	444.0	458.3
77.5°	221.2	283.3	353.3	397.8	413.7
80°	173.5	237.1	307.1	354.9	367.6
82.5°	125.7	192.6	262.6	311.9	326.2
85°	84.3	151.2	222.8	270.5	286.4
87.5°	52.5	117.8	187.8	233.9	248.2
90°	26.9	95.5	167.5	216.5	230.1
92.5°	30.7	85.5	157.6	204.9	217.6
95°	45.8	82.8	148.4	194.2	208.9
97.5°	66.9	123.1	140.5	184.2	199.0
100°	92.2	141.8	140.9	176.2	187.8
102.5°	122.3	162.7	228.7	167.6	180.3
105°	151.4	186.0	247.1	291.0	287.3
107.5°	181.0	209.5	268.4	310.5	323.4
110°	209.5	233.2	291.6	329.1	343.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	237.1	258.9	312.3	346.9	361.5
115°	265.5	281.3	331.7	367.7	378.8
117.5°	292.4	303.8	352.9	385.9	398.6
120°	318.2	324.8	370.5	403.2	415.0
122.5°	343.8	344.7	388.5	420.7	431.0
125°	366.3	366.5	405.4	437.0	446.9
127.5°	389.5	388.4	422.5	450.6	461.4
130°	410.3	409.1	435.9	465.0	474.5
132.5°	430.8	430.1	451.0	478.4	487.6
135°	449.7	449.2	462.1	488.5	498.9
137.5°	467.9	466.3	475.0	499.7	507.2
140°	485.6	485.0	487.5	509.5	517.9
142.5°	500.0	501.8	500.7	519.1	525.5
145°	516.4	516.2	516.2	526.1	533.4
147.5°	529.1	530.3	529.8	531.9	538.7
150°	543.3	543.5	543.0	543.0	543.5
152.5°	553.5	554.9	554.0	554.9	554.4
155°	564.4	564.9	563.5	565.4	564.0
157.5°	574.0	574.0	572.2	574.5	572.2
160°	582.2	580.8	580.4	583.1	580.4
162.5°	589.5	587.7	587.2	590.0	586.8
165°	595.4	593.1	593.1	596.8	592.7
167.5°	600.4	598.2	597.7	601.8	597.2
170°	604.5	601.8	602.3	605.9	601.3
172.5°	607.3	604.5	605.0	608.6	603.6
175°	609.1	606.4	606.8	610.9	605.4
177.5°	610.5	607.3	608.2	611.8	606.4
180°	609.1	609.1	609.1	609.1	609.1

(END OF REPORT)