

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: P1033344

Luminaire Tested: S124DIW-B1195D470UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033344
REPORT IS A COMBINATION OF REPORTS P997199 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-D1
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

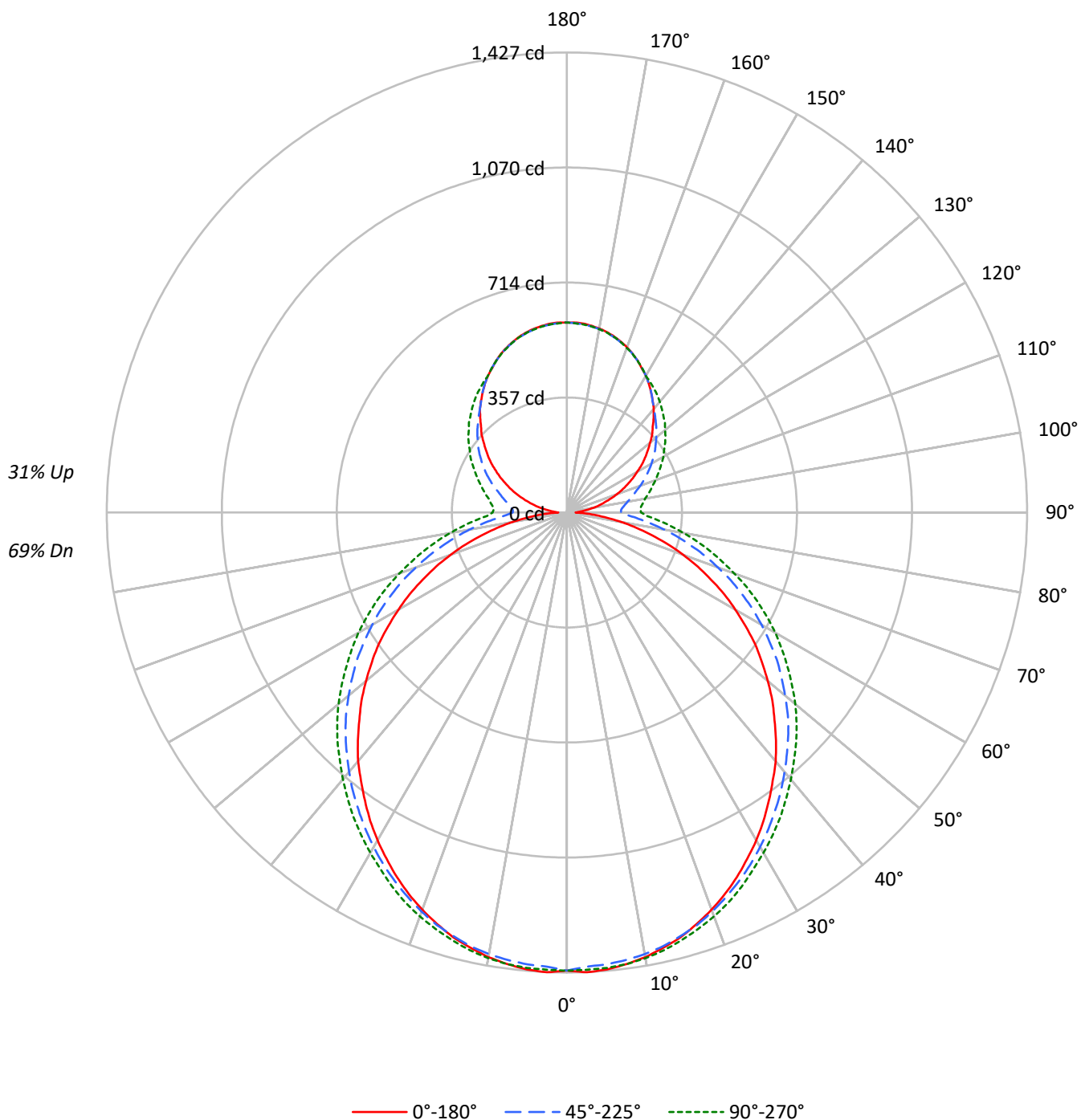
Lumens per Lamp: N/A
Luminaire Lumens: 6481.0 lumens
Efficiency: N/A
Efficacy: 87.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	112	112	112	112	106	106	106	106	94	94	94	83	83	83	74	74	74
1	101	96	91	87	95	90	86	83	80	77	74	71	69	67	63	61	60
2	91	83	76	70	86	78	72	67	70	65	61	62	58	55	55	52	49
3	83	72	64	58	78	68	61	55	61	55	50	54	50	46	48	44	41
4	76	64	55	48	71	60	52	46	54	48	42	48	43	39	43	38	35
5	69	57	48	41	65	54	46	40	48	42	36	43	38	33	38	34	30
6	64	51	42	36	60	48	40	34	43	37	32	39	33	29	35	30	26
7	59	46	37	31	55	44	36	30	39	33	28	35	30	26	31	27	23
8	55	42	33	28	52	40	32	27	36	29	25	32	27	23	29	24	21
9	51	38	30	25	48	36	29	24	33	27	22	30	24	20	27	22	19
10	48	35	27	22	45	33	26	21	30	24	20	27	22	19	25	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	2.1
10°-20°	385.8	6.0
20°-30°	583.3	9.0
30°-40°	705.7	10.9
40°-50°	746.0	11.5
50°-60°	702.1	10.8
60°-70°	582.6	9.0
70°-80°	408.9	6.3
80°-90°	231.8	3.6
90°-100°	175.6	2.7
100°-110°	216.6	3.3
110°-120°	263.6	4.1
120°-130°	296.1	4.6
130°-140°	306.1	4.7
140°-150°	287.8	4.4
150°-160°	239.3	3.7
160°-170°	159.2	2.5
170°-180°	55.7	0.9
0°-30°	1103.7	17.0
0°-40°	1809.5	27.9
0°-60°	3257.6	50.3
0°-90°	4480.9	69.1
90°-120°	655.9	10.1
90°-150°	1545.8	23.9
90°-180°	2000.0	30.9
0°-180°	6481.0	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°	48	105	173	217	232	46
105°	120	153	213	255	269	129
115°	208	223	273	307	318	206
125°	296	294	334	363	371	264
135°	376	379	390	415	423	292
145°	455	455	456	465	470	285
155°	520	520	519	521	519	239
165°	566	564	563	566	564	159
175°	588	586	586	589	586	56
180°	589	589	589	589	589	

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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°	35.7	97.4	168.0	214.0	227.2
95°	48.0	104.6	173.0	217.4	231.7
97.5°	62.8	112.6	181.5	224.8	239.1
100°	81.3	124.5	190.6	234.5	245.6
102.5°	102.3	137.7	201.9	244.6	257.8
105°	120.5	152.7	213.4	254.6	268.7
107.5°	142.8	170.4	226.5	268.1	278.8
110°	164.0	187.2	242.4	278.1	292.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	186.1	205.2	256.8	291.9	304.6
115°	208.2	222.6	272.6	307.1	317.7
117.5°	230.5	240.1	287.3	319.5	330.8
120°	251.3	257.8	302.7	332.2	345.8
122.5°	274.6	275.0	317.5	347.9	356.8
125°	295.7	294.1	333.5	362.8	371.4
127.5°	316.3	316.0	346.9	374.6	385.3
130°	336.5	336.3	361.7	389.5	397.2
132.5°	358.9	358.2	376.8	402.9	412.0
135°	376.4	379.1	390.2	414.8	422.9
137.5°	397.8	397.6	404.9	427.3	435.8
140°	419.2	418.5	420.1	440.4	447.8
142.5°	437.2	438.1	436.1	453.6	460.0
145°	455.0	455.2	455.7	464.7	469.7
147.5°	473.2	473.9	473.4	474.6	480.5
150°	489.6	489.8	489.8	489.8	489.4
152.5°	503.5	504.4	504.9	506.2	504.9
155°	519.5	519.5	519.0	520.8	519.0
157.5°	533.1	532.2	532.2	533.6	532.2
160°	545.0	544.5	544.1	545.4	543.2
162.5°	555.9	554.5	554.1	556.8	554.5
165°	565.5	564.1	563.2	565.9	564.1
167.5°	573.2	571.4	571.4	574.1	571.4
170°	579.6	577.3	577.8	580.5	577.3
172.5°	584.2	582.3	582.3	585.5	582.3
175°	588.3	586.0	585.5	588.7	585.5
177.5°	590.1	587.8	587.8	591.0	587.4
180°	589.2	589.2	589.2	589.2	589.2

(END OF REPORT)