

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: P1033332

Luminaire Tested: S124DIW-B1195D470UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033332
REPORT IS A COMBINATION OF REPORTS P997181 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D470UB30-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

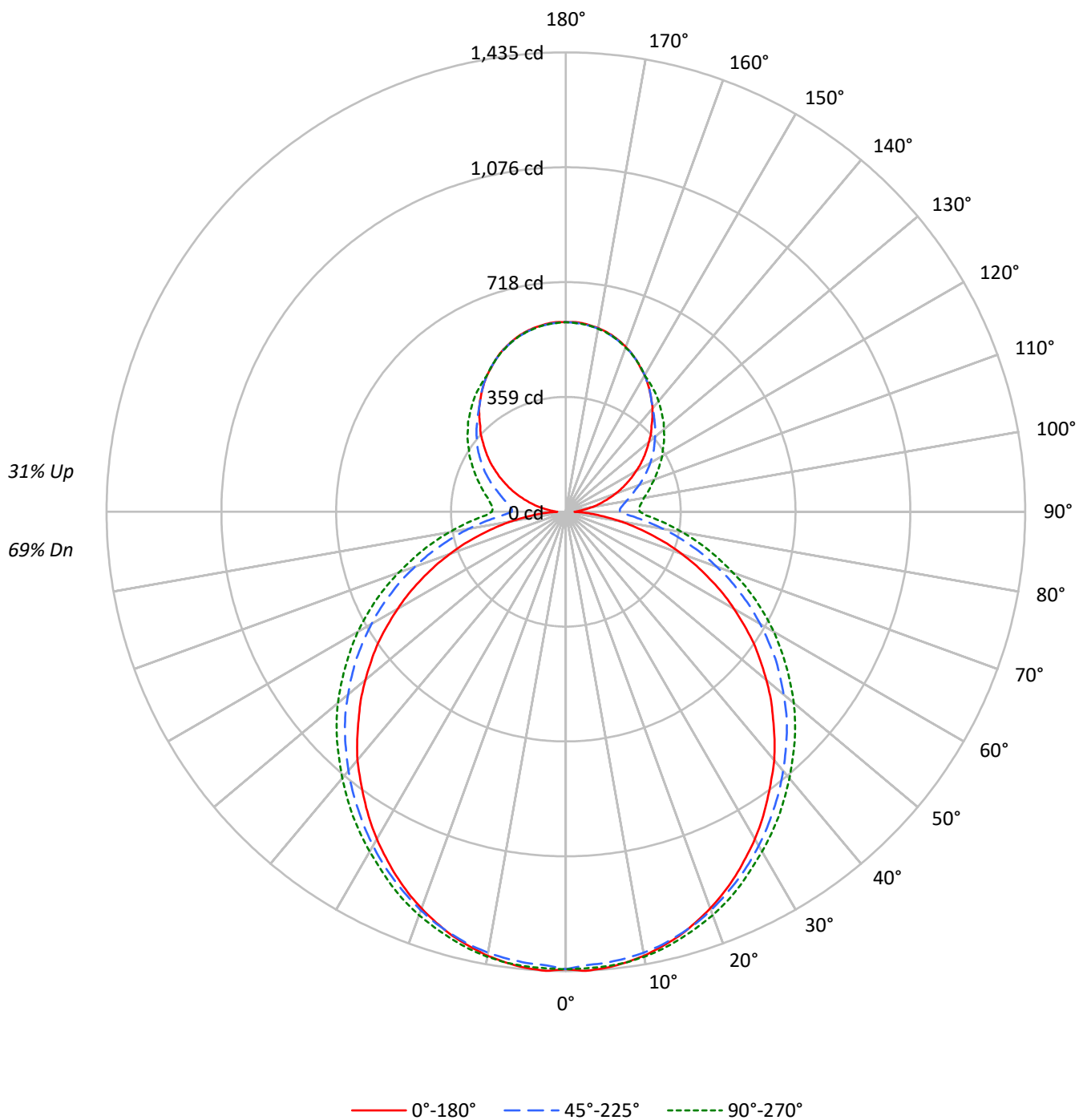
Lumens per Lamp: N/A
Luminaire Lumens: 6516.9 lumens
Efficiency: N/A
Efficacy: 87.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	11653	11653	11653
5°	11685	11349	11370
10°	11609	11126	11094
15°	11501	10875	10783
20°	11339	10603	10481
25°	11158	10303	10156
30°	10962	10006	9823
35°	10739	9702	9528
40°	10561	9411	9221
45°	10298	9137	8950
50°	10073	8827	8665
55°	9841	8527	8336
60°	9481	8155	8027
65°	9085	7753	7654
70°	8605	7294	7225
75°	7931	6784	6815
80°	7173	6263	6384
85°	6171	5740	6037

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10298 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.4	2.1
10°-20°	387.9	6.0
20°-30°	586.6	9.0
30°-40°	709.6	10.9
40°-50°	750.2	11.5
50°-60°	706.0	10.8
60°-70°	585.9	9.0
70°-80°	411.1	6.3
80°-90°	233.0	3.6
90°-100°	176.6	2.7
100°-110°	217.8	3.3
110°-120°	265.0	4.1
120°-130°	297.7	4.6
130°-140°	307.7	4.7
140°-150°	289.4	4.4
150°-160°	240.6	3.7
160°-170°	160.1	2.5
170°-180°	56.1	0.9
0°-30°	1109.9	17.0
0°-40°	1819.6	27.9
0°-60°	3275.8	50.3
0°-90°	4505.9	69.1
90°-120°	659.5	10.1
90°-150°	1554.3	23.9
90°-180°	2011.0	30.9
0°-180°	6516.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1429	1429	1429	1429	1429	
5°	1431	1426	1415	1427	1426	136
15°	1371	1373	1368	1383	1381	386
25°	1255	1264	1269	1287	1288	578
35°	1098	1117	1133	1155	1160	687
45°	915	946	976	1003	1011	707
55°	717	750	798	830	840	639
65°	496	547	602	642	654	492
75°	275	334	402	446	461	292
85°	85	152	224	272	288	88
90°	27	96	168	218	231	20
95°	48	105	174	219	233	46
105°	121	154	215	256	270	130
115°	209	224	274	309	320	207
125°	297	296	335	365	373	265
135°	378	381	392	417	425	293
145°	458	458	458	467	472	286
155°	522	522	522	524	522	240
165°	569	567	566	569	567	160
175°	592	589	589	592	589	56
180°	592	592	592	592	592	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1429.0	1429.0	1429.0	1429.0	1429.0
2.5°	1435.4	1430.6	1417.8	1429.0	1427.4
5°	1430.6	1425.8	1414.6	1427.4	1425.8
7.5°	1421.0	1417.8	1408.2	1422.6	1421.0
10°	1408.2	1406.6	1398.6	1413.0	1411.4
12.5°	1390.6	1390.6	1385.8	1398.6	1398.6
15°	1371.4	1373.0	1368.2	1382.6	1381.0
17.5°	1345.8	1350.6	1349.0	1363.4	1361.8
20°	1318.6	1323.4	1325.0	1341.0	1341.0
22.5°	1288.2	1294.6	1297.8	1313.8	1317.0
25°	1254.6	1264.2	1269.0	1286.6	1288.2
27.5°	1217.8	1232.2	1238.6	1254.6	1256.2
30°	1181.0	1193.8	1205.0	1222.6	1225.8
32.5°	1140.9	1157.0	1169.8	1190.6	1193.8
35°	1097.7	1116.9	1132.9	1155.4	1160.2
37.5°	1054.5	1076.9	1096.1	1118.5	1123.3
40°	1012.9	1033.7	1056.1	1080.1	1086.5
42.5°	964.9	988.9	1016.1	1043.3	1048.1
45°	915.3	945.7	976.1	1003.3	1011.3
47.5°	868.9	899.3	934.5	961.7	971.3
50°	817.7	852.9	888.1	920.1	929.7
52.5°	766.5	801.7	843.3	875.3	884.9
55°	716.9	750.5	798.5	830.5	840.1
57.5°	660.9	702.5	748.9	787.3	795.3
60°	606.5	648.1	700.9	737.7	750.5
62.5°	553.7	600.1	652.9	689.7	702.5
65°	496.1	547.3	601.7	641.7	654.5
67.5°	441.7	496.1	553.7	593.7	606.5
70°	385.7	440.1	500.9	544.1	555.3
72.5°	331.2	387.3	452.9	494.5	507.3
75°	275.2	334.4	401.7	446.5	460.9
77.5°	222.4	284.8	355.2	400.1	416.1
80°	174.4	238.4	308.8	356.8	369.6
82.5°	126.4	193.6	264.0	313.6	328.0
85°	84.8	152.0	224.0	272.0	288.0
87.5°	52.8	118.4	188.8	235.2	249.6
90°	27.0	96.0	168.5	217.6	231.3
92.5°	35.9	97.9	169.0	215.1	228.4
95°	48.3	105.2	174.0	218.6	233.0
97.5°	63.2	113.2	182.5	225.9	240.3
100°	81.7	125.2	191.7	235.8	247.0
102.5°	102.8	138.5	202.9	245.9	259.2
105°	121.2	153.6	214.6	256.0	270.2
107.5°	143.6	171.3	227.7	269.6	280.3
110°	164.9	188.2	243.8	279.7	293.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	187.1	206.3	258.2	293.4	306.2
115°	209.4	223.8	274.0	308.8	319.5
117.5°	231.8	241.4	289.0	321.2	332.6
120°	252.7	259.3	304.3	334.0	347.7
122.5°	276.0	276.5	319.2	349.9	358.8
125°	297.3	295.7	335.3	364.8	373.4
127.5°	318.0	317.7	348.8	376.7	387.4
130°	338.3	338.1	363.7	391.6	399.4
132.5°	360.8	360.1	378.9	405.1	414.3
135°	378.4	381.2	392.4	417.1	425.3
137.5°	400.0	399.8	407.1	429.7	438.2
140°	421.5	420.8	422.4	442.8	450.3
142.5°	439.6	440.5	438.5	456.1	462.5
145°	457.5	457.7	458.2	467.3	472.3
147.5°	475.8	476.5	476.0	477.2	483.1
150°	492.3	492.5	492.5	492.5	492.1
152.5°	506.3	507.2	507.7	509.0	507.7
155°	522.3	522.3	521.9	523.7	521.9
157.5°	536.1	535.1	535.1	536.5	535.1
160°	548.0	547.5	547.1	548.4	546.1
162.5°	559.0	557.6	557.1	559.9	557.6
165°	568.6	567.2	566.3	569.0	567.2
167.5°	576.4	574.5	574.5	577.3	574.5
170°	582.8	580.5	581.0	583.7	580.5
172.5°	587.4	585.5	585.5	588.7	585.5
175°	591.5	589.2	588.7	592.0	588.7
177.5°	593.3	591.0	591.0	594.2	590.6
180°	592.4	592.4	592.4	592.4	592.4

(END OF REPORT)