

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: P1033221

Luminaire Tested: S124DIW-B1020D770UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033221
REPORT IS A COMBINATION OF REPORTS P996926 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D770UB35-4F0-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

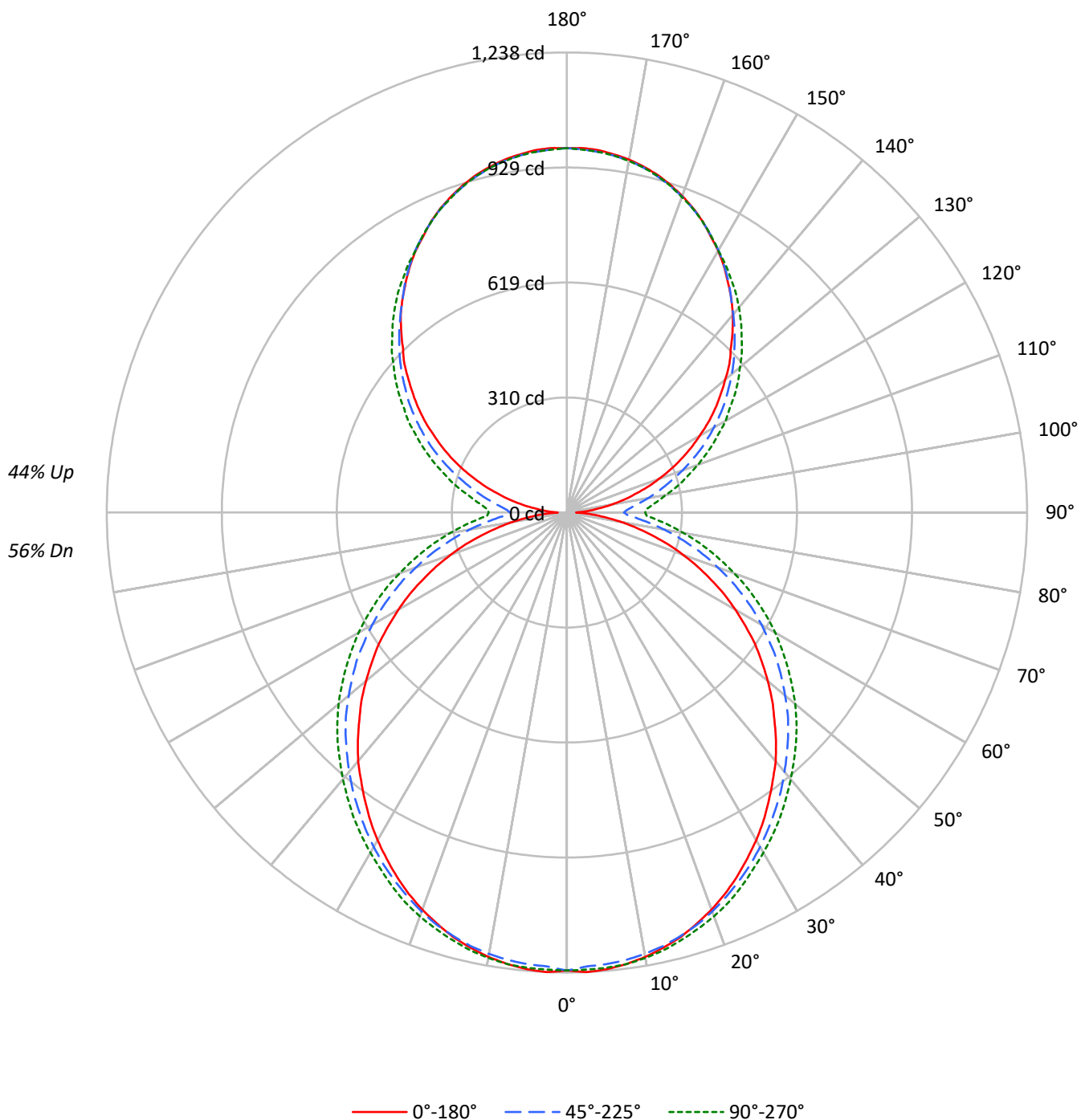
Lumens per Lamp: N/A
Luminaire Lumens: 6924.0 lumens
Efficiency: N/A
Efficacy: 98.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 70
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	98	93	89	85	91	87	83	79	74	72	69	63	61	59	53	51	50
2	89	81	74	68	82	75	69	64	65	60	56	55	51	48	46	43	41
3	81	71	63	56	75	66	59	53	57	51	47	48	44	40	40	37	34
4	74	62	54	47	68	58	50	45	50	44	39	43	38	34	36	32	29
5	68	55	47	40	62	52	44	38	45	38	34	38	33	30	32	28	25
6	62	49	41	35	57	46	39	33	40	34	29	34	29	26	29	25	22
7	57	45	36	30	53	42	34	29	36	30	26	31	26	23	26	23	20
8	53	40	32	27	49	38	31	26	33	27	23	28	24	20	24	20	18
9	50	37	29	24	46	35	28	23	30	24	20	26	21	18	22	19	16
10	46	34	26	21	43	32	25	20	28	22	18	24	20	16	21	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10050	10050	10050
5°	10078	9788	9806
10°	10012	9595	9568
15°	9919	9379	9300
20°	9779	9145	9040
25°	9623	8887	8759
30°	9454	8630	8472
35°	9263	8368	8217
40°	9108	8117	7953
45°	8881	7881	7720
50°	8689	7613	7474
55°	8487	7355	7190
60°	8177	7033	6923
65°	7834	6686	6602
70°	7420	6291	6231
75°	6841	5850	5877
80°	6186	5403	5507
85°	5319	4951	5207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8881 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	1.7
10°-20°	334.6	4.8
20°-30°	505.9	7.3
30°-40°	612.0	8.8
40°-50°	647.0	9.3
50°-60°	608.9	8.8
60°-70°	505.3	7.3
70°-80°	354.6	5.1
80°-90°	202.0	2.9
90°-100°	182.9	2.6
100°-110°	279.5	4.0
110°-120°	384.3	5.5
120°-130°	462.1	6.7
130°-140°	496.0	7.2
140°-150°	476.2	6.9
150°-160°	398.1	5.8
160°-170°	264.9	3.8
170°-180°	92.8	1.3
0°-30°	957.3	13.8
0°-40°	1569.3	22.7
0°-60°	2825.3	40.8
0°-90°	3887.2	56.1
90°-120°	846.7	12.2
90°-150°	2281.0	32.9
90°-180°	3037.0	43.9
0°-180°	6924.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1234	1230	1220	1231	1230	117
15°	1183	1184	1180	1192	1191	333
25°	1082	1090	1094	1110	1111	498
35°	947	963	977	996	1001	593
45°	789	816	842	865	872	610
55°	618	647	689	716	725	551
65°	428	472	519	553	564	424
75°	237	288	346	385	398	252
85°	73	131	193	235	248	76
90°	24	88	153	198	210	18
95°	63	116	178	217	230	64
105°	189	217	272	308	322	201
115°	339	351	394	424	432	335
125°	487	486	519	544	551	434
135°	624	628	638	658	664	483
145°	756	757	758	766	769	473
155°	864	864	864	867	864	398
165°	941	939	937	942	939	265
175°	979	975	974	980	974	93
180°	980	980	980	980	980	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1232.5	1232.5	1232.5	1232.5	1232.5
2.5°	1238.0	1233.9	1222.8	1232.5	1231.1
5°	1233.9	1229.7	1220.0	1231.1	1229.7
7.5°	1225.6	1222.8	1214.5	1227.0	1225.6
10°	1214.5	1213.1	1206.2	1218.7	1217.3
12.5°	1199.3	1199.3	1195.2	1206.2	1206.2
15°	1182.8	1184.2	1180.0	1192.4	1191.1
17.5°	1160.7	1164.8	1163.5	1175.9	1174.5
20°	1137.2	1141.4	1142.8	1156.6	1156.6
22.5°	1111.0	1116.5	1119.3	1133.1	1135.9
25°	1082.0	1090.3	1094.5	1109.6	1111.0
27.5°	1050.3	1062.7	1068.2	1082.0	1083.4
30°	1018.5	1029.6	1039.3	1054.4	1057.2
32.5°	984.0	997.8	1008.9	1026.8	1029.6
35°	946.8	963.3	977.1	996.5	1000.6
37.5°	909.5	928.8	945.4	964.7	968.9
40°	873.6	891.6	910.9	931.6	937.1
42.5°	832.2	852.9	876.4	899.9	904.0
45°	789.4	815.7	841.9	865.4	872.3
47.5°	749.4	775.6	806.0	829.5	837.7
50°	705.3	735.6	766.0	793.6	801.9
52.5°	661.1	691.5	727.3	754.9	763.2
55°	618.3	647.3	688.7	716.3	724.6
57.5°	570.0	605.9	645.9	679.0	685.9
60°	523.1	559.0	604.5	636.2	647.3
62.5°	477.5	517.6	563.1	594.8	605.9
65°	427.8	472.0	518.9	553.4	564.5
67.5°	380.9	427.8	477.5	512.0	523.1
70°	332.6	379.5	432.0	469.2	478.9
72.5°	285.7	334.0	390.6	426.5	437.5
75°	237.4	288.5	346.4	385.1	397.5
77.5°	191.8	245.7	306.4	345.0	358.8
80°	150.4	205.6	266.4	307.8	318.8
82.5°	109.0	167.0	227.7	270.5	282.9
85°	73.1	131.1	193.2	234.6	248.4
87.5°	45.5	102.1	162.9	202.9	215.3
90°	24.4	87.9	153.3	197.9	210.4
92.5°	40.4	98.6	161.8	202.6	214.4
95°	63.4	115.8	177.7	217.2	229.7
97.5°	89.4	135.4	198.1	237.0	249.4
100°	121.3	160.3	220.9	259.7	269.3
102.5°	156.2	187.3	245.8	284.0	295.8
105°	189.0	217.4	271.5	308.3	321.6
107.5°	226.2	250.5	299.5	337.0	346.0
110°	262.7	283.6	331.2	361.3	374.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	300.8	317.3	361.4	391.7	402.8
115°	338.8	351.2	393.9	423.5	432.4
117.5°	376.0	384.3	424.9	451.6	460.4
120°	411.7	418.9	456.7	480.5	493.0
122.5°	450.4	451.2	487.7	513.0	518.8
125°	486.9	485.5	519.3	544.0	550.7
127.5°	521.0	521.9	548.0	571.4	580.2
130°	556.0	557.0	579.0	602.4	607.7
132.5°	593.2	593.4	609.1	631.1	638.7
135°	623.7	628.3	637.9	658.4	664.5
137.5°	659.3	660.2	667.2	685.7	693.3
140°	695.0	695.1	696.5	713.6	719.8
142.5°	726.2	727.7	725.5	740.7	746.2
145°	755.7	757.4	758.1	765.7	768.9
147.5°	786.1	788.5	787.7	788.3	793.1
150°	813.4	815.0	815.0	815.0	814.2
152.5°	837.7	839.3	840.0	842.3	840.0
155°	864.3	864.3	863.5	866.6	863.5
157.5°	887.0	885.5	885.5	887.8	885.5
160°	906.7	906.0	905.2	907.5	903.7
162.5°	924.9	922.7	921.9	926.4	922.7
165°	940.9	938.6	937.1	941.6	938.6
167.5°	953.7	950.7	950.7	955.3	950.7
170°	964.4	960.6	961.3	965.9	960.6
172.5°	971.9	968.9	968.9	974.2	968.9
175°	978.8	975.0	974.2	979.5	974.2
177.5°	981.8	978.0	978.0	983.3	977.2
180°	980.3	980.3	980.3	980.3	980.3

(END OF REPORT)