

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: P1033190

Luminaire Tested: S124DIW-B1020D470UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033190
REPORT IS A COMBINATION OF REPORTS P996859 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D470UB35-4F0-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

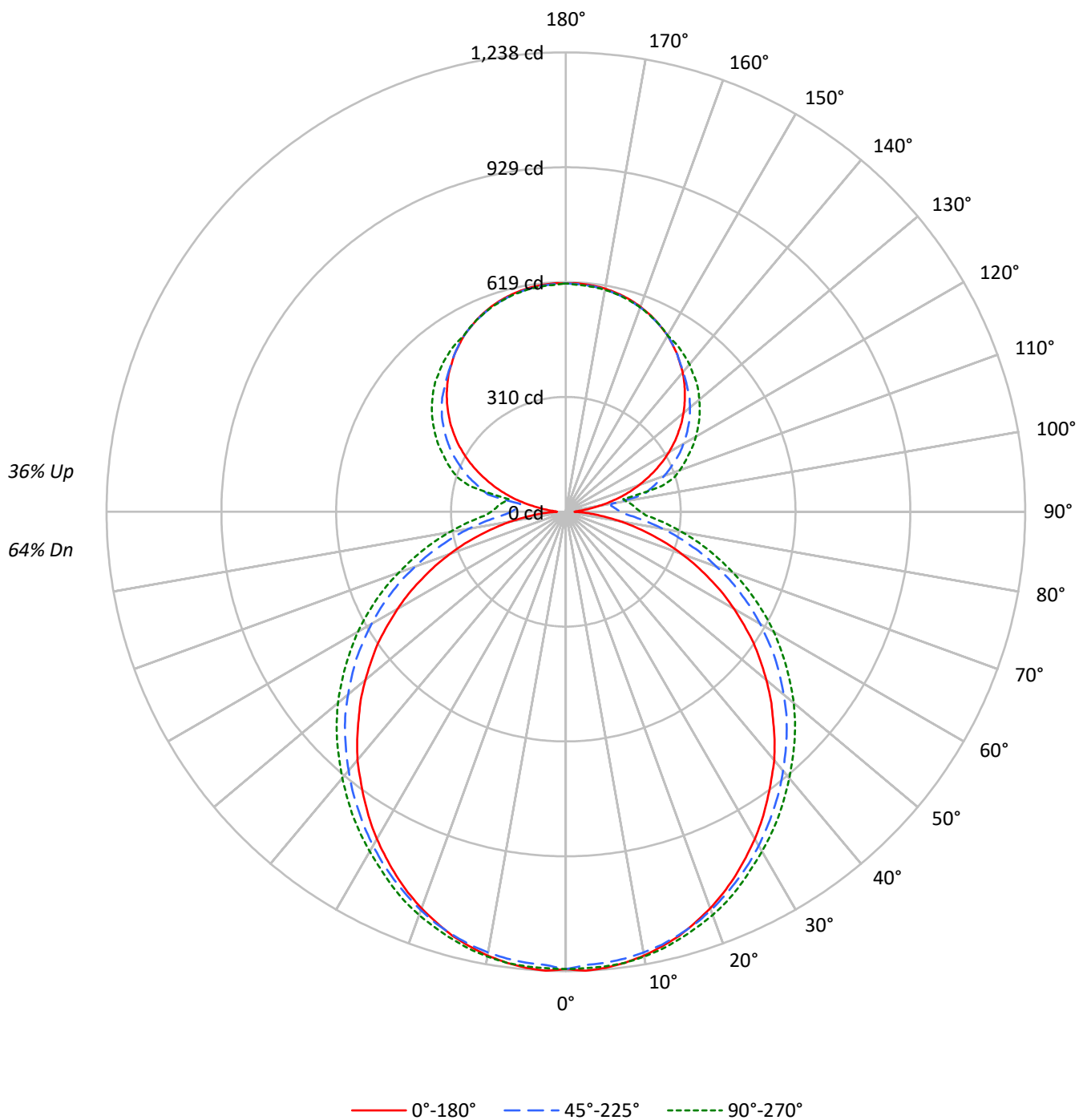
Lumens per Lamp: N/A
Luminaire Lumens: 6107.0 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 60
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	110	110	110	110	104	104	104	104	91	91	91	79	79	79	69	69	69
1	100	95	90	86	93	89	85	81	78	75	72	68	66	64	59	57	55
2	90	82	75	69	84	77	71	66	67	63	59	59	55	52	51	48	46
3	82	72	64	57	76	67	60	54	59	53	49	52	47	43	45	41	38
4	75	63	55	48	70	59	52	46	52	46	41	46	41	37	40	36	33
5	69	56	47	41	64	53	45	39	47	40	35	41	36	32	36	31	28
6	63	50	42	35	59	47	40	34	42	36	31	37	32	28	32	28	25
7	58	45	37	31	54	43	35	30	38	32	27	34	28	24	29	25	22
8	54	41	33	27	51	39	31	26	35	28	24	31	25	22	27	23	19
9	50	38	30	24	47	36	28	23	32	26	21	28	23	19	25	21	18
10	47	34	27	22	44	33	26	21	29	23	19	26	21	18	23	19	16

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	1.9
10°-20°	334.6	5.5
20°-30°	505.9	8.3
30°-40°	612.0	10.0
40°-50°	647.0	10.6
50°-60°	608.9	10.0
60°-70°	505.3	8.3
70°-80°	354.6	5.8
80°-90°	201.2	3.3
90°-100°	139.4	2.3
100°-110°	222.6	3.6
110°-120°	316.0	5.2
120°-130°	359.3	5.9
130°-140°	363.2	5.9
140°-150°	329.0	5.4
150°-160°	263.0	4.3
160°-170°	169.6	2.8
170°-180°	58.5	1.0
0°-30°	957.3	15.7
0°-40°	1569.3	25.7
0°-60°	2825.3	46.3
0°-90°	3886.4	63.6
90°-120°	678.0	11.1
90°-150°	1729.5	28.3
90°-180°	2221.0	36.4
0°-180°	6107.0	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	84	147	190	202	16
95°	43	73	130	170	183	45
105°	151	181	235	273	268	159
115°	267	281	324	356	365	263
125°	369	370	403	431	439	330
135°	454	453	465	488	497	350
145°	521	521	521	530	536	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°	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°	23.5	83.7	146.7	189.6	201.5
92.5°	27.6	75.0	138.1	179.4	190.4
95°	43.2	73.2	130.2	170.2	183.1
97.5°	64.9	115.0	123.3	161.5	174.4
100°	90.7	134.8	125.1	154.6	164.7
102.5°	121.0	156.9	214.9	147.2	158.2
105°	150.9	181.3	234.7	273.3	267.7
107.5°	180.8	205.7	257.2	294.0	305.6
110°	209.8	230.6	281.6	314.2	326.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	237.9	257.2	303.7	333.6	346.5
115°	266.9	280.7	324.4	355.6	365.3
117.5°	294.1	304.2	347.0	375.4	386.5
120°	320.3	326.2	365.8	394.4	404.4
122.5°	346.0	347.0	385.2	413.2	421.9
125°	369.0	369.5	403.0	430.7	439.4
127.5°	392.5	391.6	421.5	445.9	455.0
130°	413.6	412.8	436.2	461.5	469.8
132.5°	434.3	434.0	452.3	476.3	484.1
135°	453.8	453.3	464.7	487.8	497.0
137.5°	472.2	470.8	478.6	500.2	506.6
140°	490.1	489.6	491.9	511.2	518.6
142.5°	504.8	506.7	505.7	521.8	527.3
145°	521.4	521.4	521.4	530.1	536.5
147.5°	534.3	535.6	535.2	537.0	543.0
150°	548.5	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)