

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: P1032514

Luminaire Tested: S124DIW-B1020D470UB2750-4F0-XX-W2A-D1_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032514
REPORT IS A COMBINATION OF REPORTS P996833 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D470UB2750-4F0-XX-W2A-D1_5000K
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

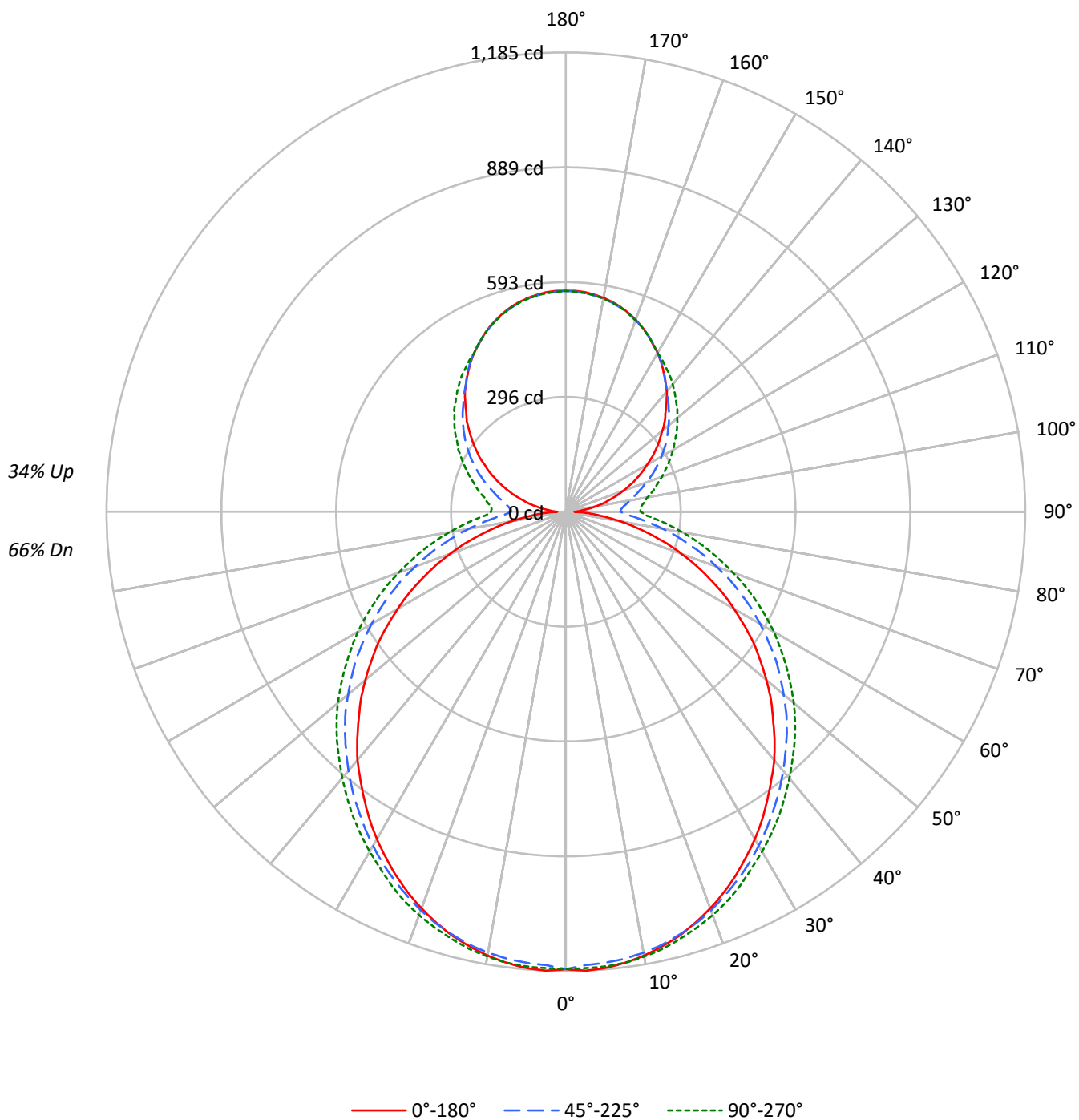
Lumens per Lamp: N/A
Luminaire Lumens: 5605.0 lumens
Efficiency: N/A
Efficacy: 93.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	50	30	10
RCR																				
0	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66		
1	100	95	91	87	94	90	86	82	79	76	73	70	67	65	61	59	57	53		
2	91	82	75	70	85	78	71	66	69	64	60	60	57	53	53	50	47	43		
3	82	72	64	57	77	68	61	55	60	54	50	53	48	45	46	43	40	36		
4	75	63	55	48	70	60	52	46	53	47	42	47	42	38	41	37	34	31		
5	69	56	48	41	64	53	45	39	47	41	36	42	37	33	37	33	29	26		
6	63	51	42	36	59	48	40	34	43	36	31	38	32	28	33	29	26	23		
7	59	46	37	31	55	43	35	30	39	32	27	34	29	25	30	26	23	20		
8	54	41	33	28	51	39	32	26	35	29	24	31	26	22	28	23	20	18		
9	51	38	30	25	48	36	29	24	32	26	22	29	24	20	26	21	18	16		
10	47	35	27	22	45	33	26	21	30	24	20	27	22	18	24	20	16	15		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9622	9622	9622
5°	9649	9371	9388
10°	9586	9187	9160
15°	9496	8980	8904
20°	9363	8755	8654
25°	9213	8507	8386
30°	9052	8262	8112
35°	8868	8012	7867
40°	8720	7771	7614
45°	8503	7545	7391
50°	8318	7289	7155
55°	8126	7042	6883
60°	7829	6734	6628
65°	7501	6402	6320
70°	7103	6023	5965
75°	6550	5602	5627
80°	5923	5172	5272
85°	5094	4741	4985

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8503 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.8	2.0
10°-20°	320.3	5.7
20°-30°	484.4	8.6
30°-40°	586.0	10.5
40°-50°	619.5	11.1
50°-60°	583.0	10.4
60°-70°	483.8	8.6
70°-80°	339.5	6.1
80°-90°	192.6	3.4
90°-100°	151.1	2.7
100°-110°	195.6	3.5
110°-120°	245.6	4.4
120°-130°	281.1	5.0
130°-140°	293.7	5.2
140°-150°	277.8	5.0
150°-160°	231.4	4.1
160°-170°	153.9	2.7
170°-180°	53.9	1.0
0°-30°	916.5	16.4
0°-40°	1502.5	26.8
0°-60°	2705.0	48.3
0°-90°	3720.8	66.4
90°-120°	592.3	10.6
90°-150°	1444.9	25.8
90°-180°	1884.0	33.6
0°-180°	5605.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1180	1180	1180	1180	1180	
5°	1181	1177	1168	1179	1177	112
15°	1132	1134	1130	1142	1140	319
25°	1036	1044	1048	1062	1064	477
35°	906	922	936	954	958	568
45°	756	781	806	828	835	584
55°	592	620	659	686	694	528
65°	410	452	497	530	540	406
75°	227	276	332	369	381	241
85°	70	126	185	225	238	73
90°	22	80	140	181	193	16
95°	44	91	148	185	197	42
105°	115	141	192	226	238	122
115°	200	212	253	282	291	198
125°	285	284	316	341	348	254
135°	364	366	375	396	402	282
145°	440	440	441	448	452	275
155°	502	502	502	504	502	231
165°	547	546	545	547	546	154
175°	569	567	566	569	566	54
180°	570	570	570	570	570	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1180.0	1180.0	1180.0	1180.0	1180.0
2.5°	1185.3	1181.3	1170.7	1180.0	1178.6
5°	1181.3	1177.3	1168.1	1178.6	1177.3
7.5°	1173.4	1170.7	1162.8	1174.7	1173.4
10°	1162.8	1161.5	1154.9	1166.8	1165.4
12.5°	1148.3	1148.3	1144.3	1154.9	1154.9
15°	1132.4	1133.7	1129.8	1141.7	1140.3
17.5°	1111.3	1115.2	1113.9	1125.8	1124.5
20°	1088.8	1092.8	1094.1	1107.3	1107.3
22.5°	1063.7	1069.0	1071.6	1084.8	1087.5
25°	1035.9	1043.9	1047.8	1062.4	1063.7
27.5°	1005.6	1017.4	1022.7	1035.9	1037.3
30°	975.2	985.7	995.0	1009.5	1012.2
32.5°	942.1	955.3	965.9	983.1	985.7
35°	906.4	922.3	935.5	954.0	958.0
37.5°	870.8	889.3	905.1	923.6	927.6
40°	836.4	853.6	872.1	891.9	897.2
42.5°	796.8	816.6	839.1	861.5	865.5
45°	755.8	780.9	806.0	828.5	835.1
47.5°	717.5	742.6	771.7	794.1	802.1
50°	675.2	704.3	733.4	759.8	767.7
52.5°	632.9	662.0	696.4	722.8	730.7
55°	592.0	619.7	659.4	685.8	693.7
57.5°	545.7	580.1	618.4	650.1	656.7
60°	500.8	535.1	578.8	609.1	619.7
62.5°	457.2	495.5	539.1	569.5	580.1
65°	409.6	451.9	496.8	529.9	540.4
67.5°	364.7	409.6	457.2	490.2	500.8
70°	318.4	363.4	413.6	449.3	458.5
72.5°	273.5	319.8	373.9	408.3	418.9
75°	227.3	276.2	331.7	368.7	380.6
77.5°	183.7	235.2	293.3	330.3	343.6
80°	144.0	196.9	255.0	294.7	305.2
82.5°	104.4	159.9	218.0	259.0	270.9
85°	70.0	125.5	185.0	224.6	237.8
87.5°	43.6	97.8	155.9	194.2	206.1
90°	22.4	80.2	140.5	181.4	192.9
92.5°	31.3	83.3	142.3	180.6	191.6
95°	43.6	91.2	148.5	185.4	197.3
97.5°	58.2	100.0	157.7	193.8	205.7
100°	76.2	112.3	167.8	204.4	213.6
102.5°	96.5	126.0	179.7	215.4	226.4
105°	114.6	141.4	192.1	226.4	238.3
107.5°	136.2	159.1	205.7	240.5	249.4
110°	156.9	176.3	222.0	251.5	263.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	178.4	194.3	237.0	266.1	276.7
115°	200.0	211.9	253.3	282.0	290.7
117.5°	221.6	229.6	268.8	295.1	304.4
120°	241.9	247.7	284.6	308.8	320.3
122.5°	264.4	264.8	300.1	325.1	332.2
125°	285.1	283.8	316.4	340.6	347.6
127.5°	304.9	304.9	330.5	353.4	362.1
130°	324.8	324.7	345.9	368.8	375.0
132.5°	346.4	345.8	361.3	382.9	390.4
135°	363.5	366.1	375.4	395.6	402.3
137.5°	384.2	384.2	390.4	408.9	415.9
140°	404.9	404.5	405.8	422.5	428.7
142.5°	422.5	423.4	421.7	436.2	441.5
145°	439.7	440.2	440.6	448.1	452.1
147.5°	457.3	458.2	457.8	458.7	463.5
150°	473.2	473.7	473.7	473.7	473.2
152.5°	486.9	487.8	488.2	489.5	488.2
155°	502.3	502.3	501.9	503.6	501.9
157.5°	515.5	514.6	514.6	516.0	514.6
160°	527.0	526.5	526.1	527.4	525.2
162.5°	537.6	536.2	535.8	538.4	536.2
165°	546.8	545.5	544.6	547.3	545.5
167.5°	554.3	552.5	552.5	555.2	552.5
170°	560.5	558.3	558.7	561.4	558.3
172.5°	564.9	563.1	563.1	566.2	563.1
175°	568.8	566.6	566.2	569.3	566.2
177.5°	570.6	568.4	568.4	571.5	568.0
180°	569.7	569.7	569.7	569.7	569.7

(END OF REPORT)