

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: P1024890

Luminaire Tested: S124DIP-B1020D1205UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024890
REPORT IS A COMBINATION OF REPORTS P995235 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1205UB50-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

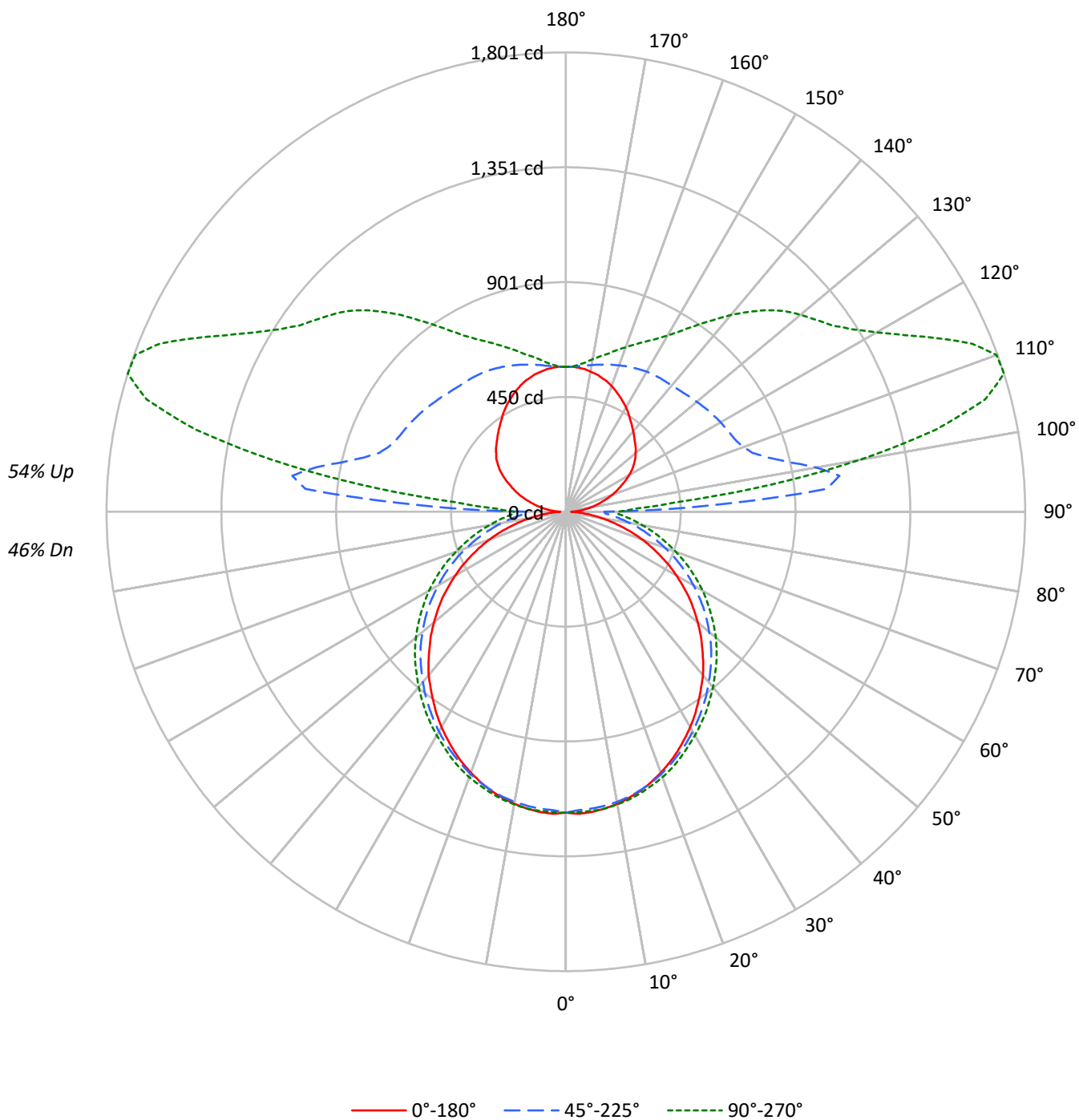
Lumens per Lamp: N/A
Luminaire Lumens: 8173.2 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 81.8
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52
1	96	91	87	83	88	84	80	77	69	67	64	56	55	53	45	43	42
2	87	79	73	67	79	73	67	62	60	56	53	49	46	43	39	37	35
3	79	69	62	55	72	63	57	51	53	48	44	43	39	36	34	31	29
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25
5	66	54	46	40	60	50	42	37	42	36	32	34	30	26	27	24	21
6	61	48	40	34	55	45	37	32	37	32	27	31	26	23	24	21	19
7	56	44	35	30	51	40	33	28	34	28	24	28	23	20	22	19	17
8	52	39	32	26	47	36	29	25	31	25	21	25	21	18	20	17	15
9	48	36	28	23	44	33	26	22	28	23	19	23	19	16	19	16	13
10	45	33	26	21	41	30	24	19	26	21	17	21	17	14	17	14	12

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	1.4
10°-20°	320.3	3.9
20°-30°	484.4	5.9
30°-40°	586.0	7.2
40°-50°	619.5	7.6
50°-60°	583.0	7.1
60°-70°	483.8	5.9
70°-80°	339.5	4.2
80°-90°	193.6	2.4
90°-100°	536.2	6.6
100°-110°	943.1	11.5
110°-120°	822.0	10.1
120°-130°	674.8	8.3
130°-140°	550.3	6.7
140°-150°	412.5	5.0
150°-160°	288.0	3.5
160°-170°	169.4	2.1
170°-180°	55.1	0.7
0°-30°	916.5	11.2
0°-40°	1502.5	18.4
0°-60°	2705.0	33.1
0°-90°	3721.8	45.5
90°-120°	2301.3	28.2
90°-150°	3938.9	48.2
90°-180°	4451.0	54.5
0°-180°	8173.2	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	83	151	191	203	17
95°	54	177	1025	601	435	54
105°	143	228	820	1698	1702	153
115°	238	308	715	1346	1609	236
125°	326	385	687	1130	1274	291
135°	383	456	656	981	1118	297
145°	440	502	641	807	892	276
155°	499	539	623	706	736	230
165°	544	561	597	633	642	154
175°	567	568	573	581	578	54
180°	568	568	568	568	568	

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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°	22.2	82.9	150.9	191.4	203.2
92.5°	35.4	152.1	560.6	304.5	272.1
95°	54.1	177.0	1025.1	601.2	435.0
97.5°	77.3	182.6	1082.2	1062.9	809.0
100°	99.4	194.0	998.2	1409.1	1169.3
102.5°	121.7	208.8	896.7	1622.4	1484.3
105°	142.6	227.6	819.7	1697.5	1702.0
107.5°	168.2	248.2	767.4	1665.8	1801.3
110°	192.6	267.5	740.8	1568.6	1796.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	215.8	288.1	724.2	1451.2	1723.1
115°	237.9	308.4	715.4	1346.4	1609.0
117.5°	262.5	328.5	707.6	1261.3	1498.6
120°	285.8	346.8	701.0	1201.4	1405.8
122.5°	308.1	365.6	693.3	1160.8	1330.9
125°	325.8	384.8	686.9	1130.2	1273.8
127.5°	343.7	404.9	678.1	1099.4	1235.9
130°	356.9	423.0	670.4	1065.5	1201.2
132.5°	371.4	439.8	663.9	1026.5	1164.5
135°	383.4	456.0	656.2	981.1	1117.5
137.5°	396.8	468.6	650.9	934.3	1063.7
140°	411.3	481.5	645.8	888.6	1006.9
142.5°	425.6	493.2	643.2	847.0	946.7
145°	440.2	502.5	641.0	807.4	892.0
147.5°	456.9	512.6	637.6	773.4	840.8
150°	472.5	522.0	634.3	747.0	797.3
152.5°	485.8	531.0	628.7	725.8	763.8
155°	499.2	538.8	623.1	705.7	735.9
157.5°	512.6	546.1	617.5	686.8	710.2
160°	524.8	552.2	610.8	667.8	686.8
162.5°	536.0	557.2	604.1	649.3	664.4
165°	543.8	560.6	597.4	632.6	642.1
167.5°	552.8	563.4	590.7	618.1	624.2
170°	558.3	565.6	584.0	603.6	607.5
172.5°	563.9	567.3	577.3	590.7	590.7
175°	567.3	568.4	572.9	580.7	578.4
177.5°	569.5	568.4	569.5	573.4	569.5
180°	568.4	568.4	568.4	568.4	568.4

(END OF REPORT)