

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: P1024889

Luminaire Tested: S124DIP-B1020D1205UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024889
REPORT IS A COMBINATION OF REPORTS P995234 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-D1
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

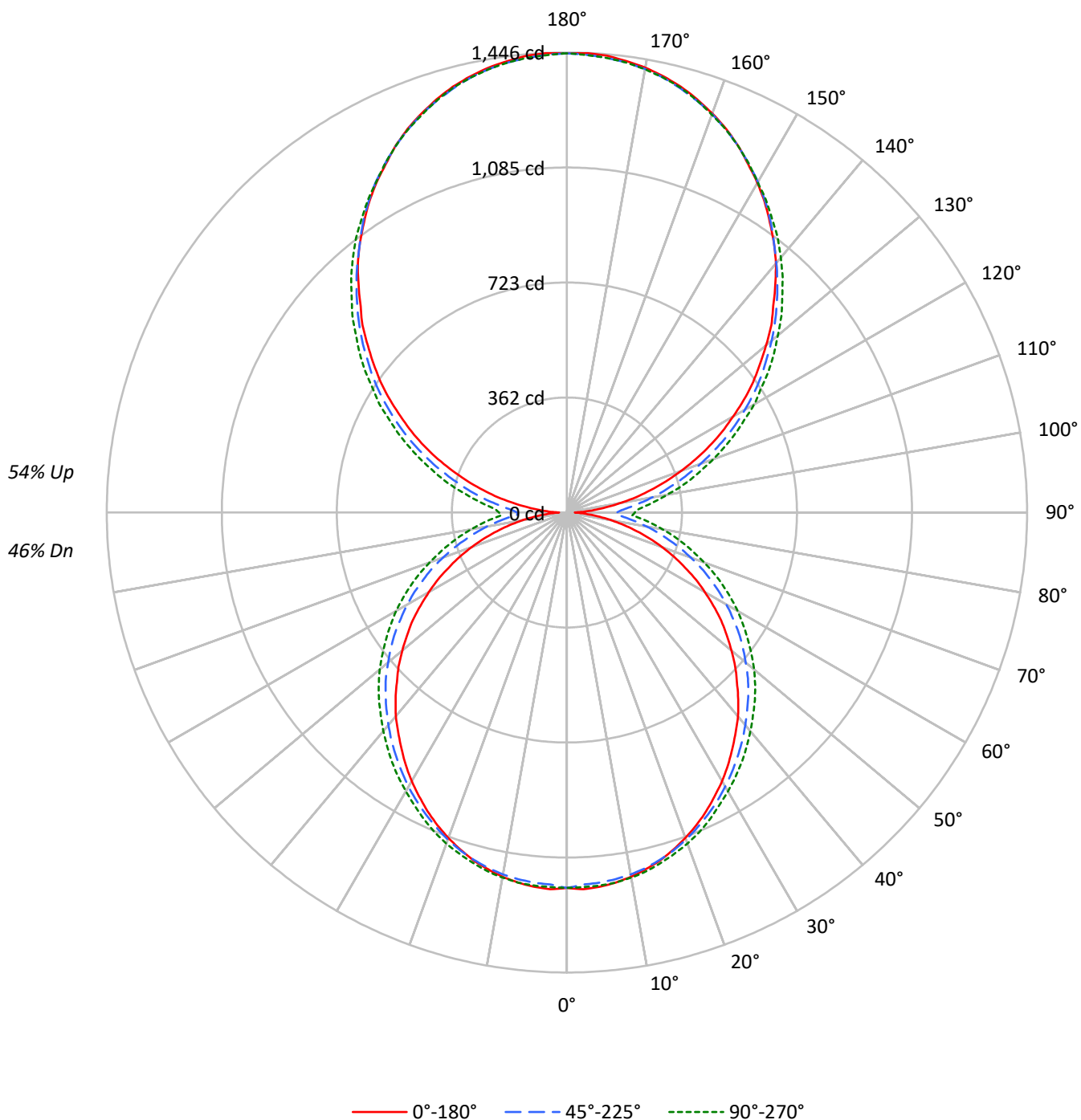
Lumens per Lamp: N/A
Luminaire Lumens: 8031.0 lumens
Efficiency: N/A
Efficacy: 98.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	106	106	106	106	98	98	98	98	81	81	81	66	66	66	53	53	53	46		
1	96	91	87	83	88	84	80	77	70	67	65	57	55	53	45	44	43	37		
2	87	79	73	67	79	73	67	62	61	56	53	49	46	44	39	37	35	30		
3	79	69	62	55	72	64	57	52	53	48	44	43	40	37	34	32	30	25		
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	31	28	25	21		
5	66	54	46	40	60	50	43	37	42	36	32	34	30	27	27	24	22	18		
6	61	48	40	34	56	45	37	32	38	32	28	31	27	23	25	21	19	16		
7	56	44	36	30	51	40	33	28	34	28	24	28	24	20	23	19	17	14		
8	52	40	32	26	48	37	30	25	31	25	21	26	21	18	21	17	15	12		
9	48	36	28	23	44	33	27	22	28	23	19	24	19	16	19	16	13	11		
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	18	14	12	10		

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	4.0
20°-30°	484.4	6.0
30°-40°	586.0	7.3
40°-50°	619.5	7.7
50°-60°	583.0	7.3
60°-70°	483.8	6.0
70°-80°	339.5	4.2
80°-90°	194.5	2.4
90°-100°	208.0	2.6
100°-110°	366.2	4.6
110°-120°	535.4	6.7
120°-130°	663.3	8.3
130°-140°	722.9	9.0
140°-150°	699.7	8.7
150°-160°	586.2	7.3
160°-170°	390.0	4.9
170°-180°	136.6	1.7
0°-30°	916.5	11.4
0°-40°	1502.5	18.7
0°-60°	2705.0	33.7
0°-90°	3722.7	46.4
90°-120°	1109.6	13.8
90°-150°	3195.4	39.8
90°-180°	4308.0	53.6
0°-180°	8031.0	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°	24	90	155	200	213	19
95°	84	138	200	239	251	86
105°	272	300	353	389	403	289
115°	495	506	547	575	583	488
125°	714	713	745	768	773	637
135°	917	924	933	952	956	710
145°	1112	1115	1116	1123	1125	696
155°	1273	1273	1272	1276	1272	586
165°	1385	1382	1380	1386	1382	391
175°	1441	1436	1434	1442	1434	137
180°	1443	1443	1443	1443	1443	

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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°	24.4	89.6	155.4	200.4	213.2
92.5°	48.8	109.6	172.0	212.4	224.1
95°	84.2	137.8	199.8	238.8	250.7
97.5°	123.1	170.3	233.4	272.2	284.1
100°	170.8	209.7	271.2	309.1	318.3
102.5°	222.1	252.4	311.5	349.2	360.8
105°	272.0	299.5	352.9	389.2	403.2
107.5°	326.7	350.3	397.6	435.1	443.3
110°	381.2	402.0	447.0	475.2	489.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	437.9	453.8	495.1	524.2	534.8
115°	494.6	506.5	546.6	574.6	582.7
117.5°	549.3	557.3	595.8	620.2	627.4
120°	602.7	611.2	646.1	667.0	679.8
122.5°	659.6	660.8	695.3	718.4	722.1
125°	714.2	712.9	744.7	767.6	773.3
127.5°	764.4	766.4	790.6	812.2	820.3
130°	816.7	818.6	839.8	861.4	864.8
132.5°	871.4	872.2	887.0	907.3	914.0
135°	916.9	923.6	932.9	951.7	956.4
137.5°	969.3	971.4	978.9	995.4	1003.1
140°	1021.8	1022.7	1024.0	1040.1	1045.6
142.5°	1068.5	1070.7	1068.3	1082.8	1088.1
145°	1112.0	1115.2	1116.3	1123.1	1125.1
147.5°	1156.7	1161.0	1159.9	1160.0	1164.2
150°	1196.9	1200.0	1200.0	1200.0	1198.9
152.5°	1233.5	1235.8	1236.9	1240.2	1236.9
155°	1272.6	1272.6	1271.5	1276.0	1271.5
157.5°	1306.1	1303.9	1303.9	1307.2	1303.9
160°	1335.1	1334.0	1332.9	1336.2	1330.7
162.5°	1361.9	1358.6	1357.4	1364.1	1358.6
165°	1385.4	1382.0	1379.8	1386.5	1382.0
167.5°	1404.3	1399.9	1399.9	1406.6	1399.9
170°	1420.0	1414.4	1415.5	1422.2	1414.4
172.5°	1431.1	1426.7	1426.7	1434.5	1426.7
175°	1441.2	1435.6	1434.5	1442.3	1434.5
177.5°	1445.6	1440.1	1440.1	1447.9	1438.9
180°	1443.4	1443.4	1443.4	1443.4	1443.4

(END OF REPORT)