

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: P1024888

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024888
REPORT IS A COMBINATION OF REPORTS P995233 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-D
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

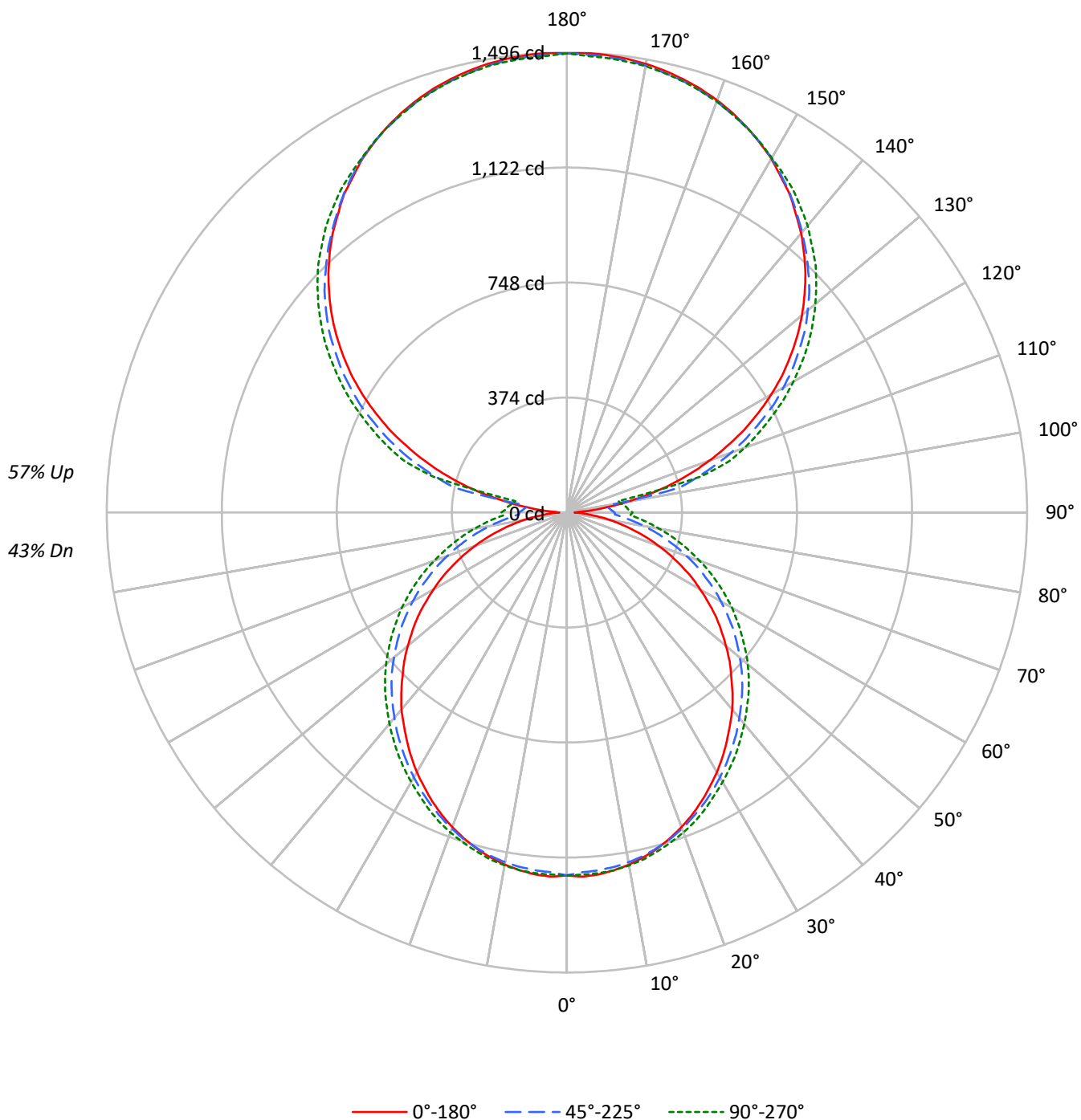
Lumens per Lamp: N/A
Luminaire Lumens: 8645.0 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50
1	95	91	87	83	87	83	79	76	68	66	63	55	53	51	43	41	40
2	86	79	72	67	79	72	66	62	59	55	52	48	45	42	37	35	33
3	79	69	61	55	71	63	56	51	52	47	43	42	38	35	32	30	28
4	72	61	53	46	65	56	48	43	46	41	36	37	33	30	29	26	24
5	66	54	46	39	60	49	42	37	41	35	31	33	29	26	26	23	20
6	60	48	40	34	55	44	37	32	37	31	27	30	26	22	23	20	18
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	21	18	16
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	19	16	14
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13
10	45	33	25	21	41	30	24	19	25	20	17	21	17	14	17	14	11

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	1.3
10°-20°	320.3	3.7
20°-30°	484.4	5.6
30°-40°	586.0	6.8
40°-50°	619.5	7.2
50°-60°	583.0	6.7
60°-70°	483.8	5.6
70°-80°	339.5	3.9
80°-90°	194.5	2.2
90°-100°	163.5	1.9
100°-110°	410.7	4.8
110°-120°	679.7	7.9
120°-130°	822.9	9.5
130°-140°	860.0	9.9
140°-150°	794.0	9.2
150°-160°	638.1	7.4
160°-170°	411.5	4.8
170°-180°	141.8	1.6
0°-30°	916.5	10.6
0°-40°	1502.5	17.4
0°-60°	2705.0	31.3
0°-90°	3722.7	43.1
90°-120°	1253.9	14.5
90°-150°	3730.8	43.2
90°-180°	4922.0	56.9
0°-180°	8645.0	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	18
95°	79	84	140	182	195	89
105°	348	381	436	479	449	365
115°	635	651	692	723	732	626
125°	887	890	921	950	959	793
135°	1097	1096	1109	1133	1143	846
145°	1263	1265	1265	1274	1282	789
155°	1383	1384	1381	1386	1382	638
165°	1459	1454	1454	1462	1452	412
175°	1493	1486	1487	1497	1484	142
180°	1493	1493	1493	1493	1493	

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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°	36.5	80.6	146.3	190.0	200.6
95°	78.6	84.2	139.6	181.9	194.9
97.5°	133.1	196.0	133.0	172.8	185.9
100°	197.6	252.1	149.5	166.2	176.6
102.5°	271.3	313.8	377.4	160.6	171.1
105°	348.0	381.0	435.5	478.6	449.0
107.5°	420.5	446.4	500.4	539.0	552.7
110°	492.9	514.8	567.7	600.3	614.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	563.0	585.6	631.4	659.4	674.4
115°	635.3	650.6	691.8	723.1	732.3
117.5°	701.2	713.7	756.6	783.2	793.8
120°	766.9	775.4	812.6	841.2	849.6
122.5°	829.4	831.7	869.6	897.1	904.2
125°	887.3	890.5	921.2	949.7	958.7
127.5°	944.2	944.1	976.0	998.7	1006.8
130°	997.6	997.4	1021.9	1046.8	1054.7
132.5°	1047.9	1048.7	1069.1	1092.7	1099.5
135°	1096.7	1095.6	1109.4	1132.7	1142.9
137.5°	1141.4	1140.1	1151.0	1173.0	1178.5
140°	1184.9	1185.9	1189.4	1209.9	1217.7
142.5°	1222.7	1227.2	1227.0	1243.7	1249.0
145°	1262.9	1264.9	1264.9	1274.0	1281.5
147.5°	1294.1	1299.5	1298.4	1300.8	1307.3
150°	1328.8	1331.9	1330.8	1330.8	1331.9
152.5°	1356.5	1359.8	1357.6	1359.8	1358.7
155°	1383.3	1384.4	1381.0	1385.5	1382.2
157.5°	1406.7	1406.7	1402.3	1407.8	1402.3
160°	1426.8	1423.5	1422.4	1429.1	1422.4
162.5°	1444.7	1440.2	1439.1	1445.8	1438.0
165°	1459.2	1453.6	1453.6	1462.5	1452.5
167.5°	1471.5	1465.9	1464.8	1474.8	1463.7
170°	1481.5	1474.8	1475.9	1484.9	1473.7
172.5°	1488.2	1481.5	1482.6	1491.6	1479.3
175°	1492.7	1486.0	1487.1	1497.2	1483.8
177.5°	1496.0	1488.2	1490.5	1499.4	1486.0
180°	1492.7	1492.7	1492.7	1492.7	1492.7

(END OF REPORT)