

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: P1024870

Luminaire Tested: S124DIP-B1020D1205UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024870
REPORT IS A COMBINATION OF REPORTS P995215 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1205UB35-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

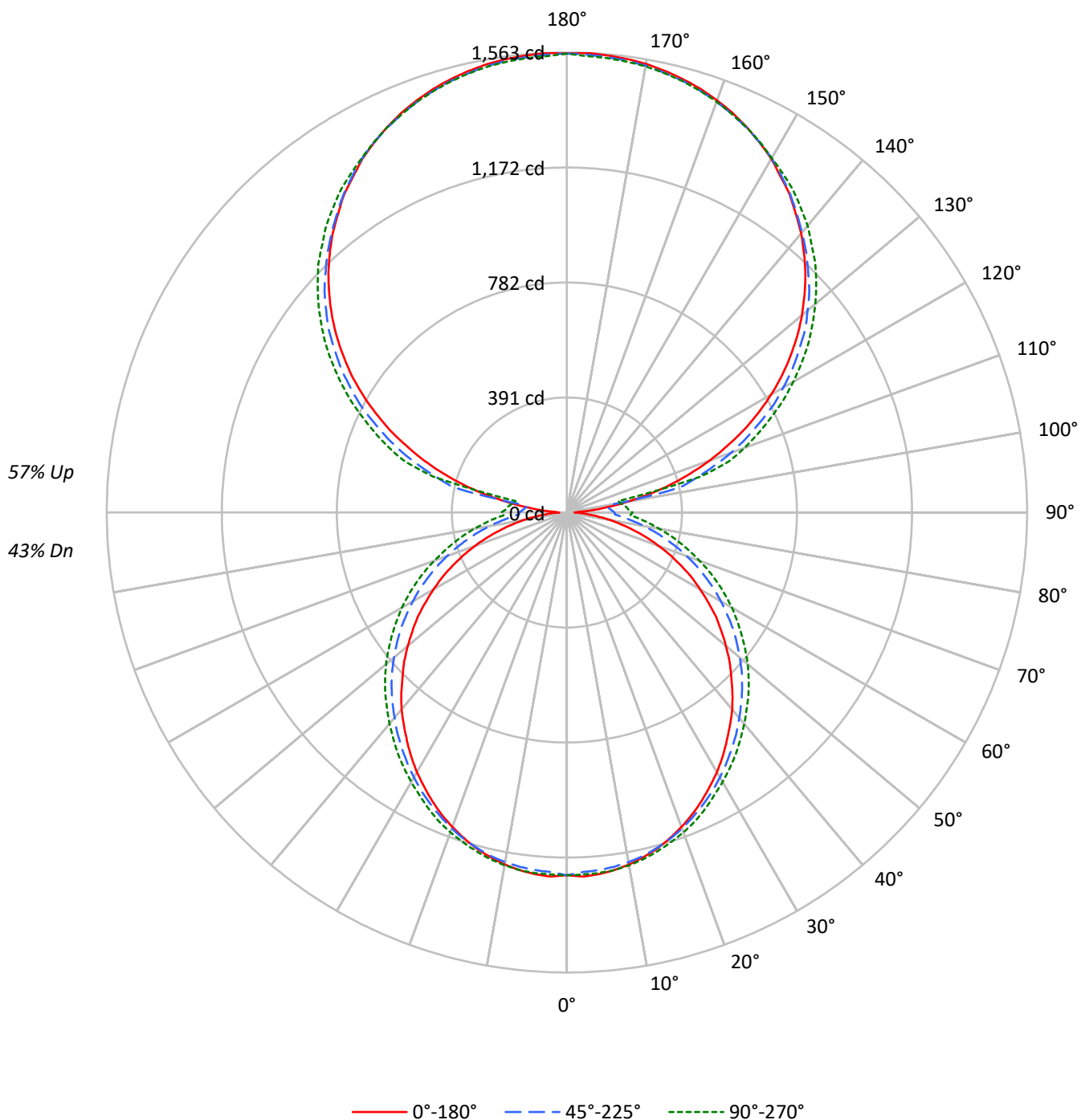
Lumens per Lamp: N/A
Luminaire Lumens: 9030.0 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	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	1.3
10°-20°	334.6	3.7
20°-30°	505.9	5.6
30°-40°	612.0	6.8
40°-50°	647.0	7.2
50°-60°	608.9	6.7
60°-70°	505.3	5.6
70°-80°	354.6	3.9
80°-90°	203.1	2.2
90°-100°	170.8	1.9
100°-110°	429.0	4.8
110°-120°	710.0	7.9
120°-130°	859.6	9.5
130°-140°	898.3	9.9
140°-150°	829.4	9.2
150°-160°	666.5	7.4
160°-170°	429.9	4.8
170°-180°	148.2	1.6
0°-30°	957.3	10.6
0°-40°	1569.3	17.4
0°-60°	2825.3	31.3
0°-90°	3888.3	43.1
90°-120°	1309.8	14.5
90°-150°	3897.1	43.2
90°-180°	5142.0	56.9
0°-180°	9030.0	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°	26	94	162	209	223	18
95°	82	88	146	190	204	93
105°	363	398	455	500	469	381
115°	664	680	723	755	765	654
125°	927	930	962	992	1001	828
135°	1146	1144	1159	1183	1194	883
145°	1319	1321	1321	1331	1339	824
155°	1445	1446	1443	1447	1444	666
165°	1524	1518	1518	1528	1517	431
175°	1559	1552	1553	1564	1550	148
180°	1559	1559	1559	1559	1559	

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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°	25.6	93.6	162.3	209.4	222.7
92.5°	38.2	84.2	152.9	198.5	209.5
95°	82.0	88.0	145.8	190.0	203.6
97.5°	139.1	204.7	138.9	180.6	194.2
100°	206.5	263.3	156.2	173.7	184.5
102.5°	283.4	327.7	394.2	167.7	178.7
105°	363.4	398.0	455.0	500.0	469.0
107.5°	439.2	466.2	522.7	563.0	577.4
110°	514.8	537.7	593.0	627.0	641.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	588.1	611.6	659.6	688.7	704.5
115°	663.7	679.6	722.6	755.3	765.0
117.5°	732.5	745.5	790.4	818.1	829.2
120°	801.1	809.9	848.8	878.7	887.4
122.5°	866.4	868.7	908.4	937.1	944.4
125°	926.8	930.1	962.2	992.0	1001.4
127.5°	986.3	986.0	1019.5	1043.2	1051.6
130°	1042.0	1041.9	1067.4	1093.5	1101.8
132.5°	1094.5	1095.5	1116.7	1141.4	1148.5
135°	1145.7	1144.5	1158.8	1183.2	1193.8
137.5°	1192.3	1190.9	1202.3	1225.3	1231.0
140°	1237.8	1238.7	1242.5	1263.9	1271.9
142.5°	1277.2	1281.9	1281.7	1299.2	1304.7
145°	1319.2	1321.3	1321.3	1330.8	1338.6
147.5°	1351.9	1357.5	1356.3	1358.9	1365.5
150°	1388.0	1391.3	1390.1	1390.1	1391.3
152.5°	1416.9	1420.4	1418.1	1420.4	1419.3
155°	1444.9	1446.1	1442.6	1447.3	1443.8
157.5°	1469.4	1469.4	1464.8	1470.6	1464.8
160°	1490.4	1486.9	1485.7	1492.7	1485.7
162.5°	1509.1	1504.4	1503.2	1510.2	1502.1
165°	1524.2	1518.4	1518.4	1527.7	1517.2
167.5°	1537.1	1531.2	1530.1	1540.6	1528.9
170°	1547.6	1540.6	1541.7	1551.1	1539.4
172.5°	1554.6	1547.6	1548.7	1558.1	1545.2
175°	1559.2	1552.2	1553.4	1563.9	1549.9
177.5°	1562.7	1554.6	1556.9	1566.2	1552.2
180°	1559.2	1559.2	1559.2	1559.2	1559.2

(END OF REPORT)