

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: P1024852

Luminaire Tested: S124DIP-B1020D1205UB27-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024852
REPORT IS A COMBINATION OF REPORTS P995182 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1205UB27-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

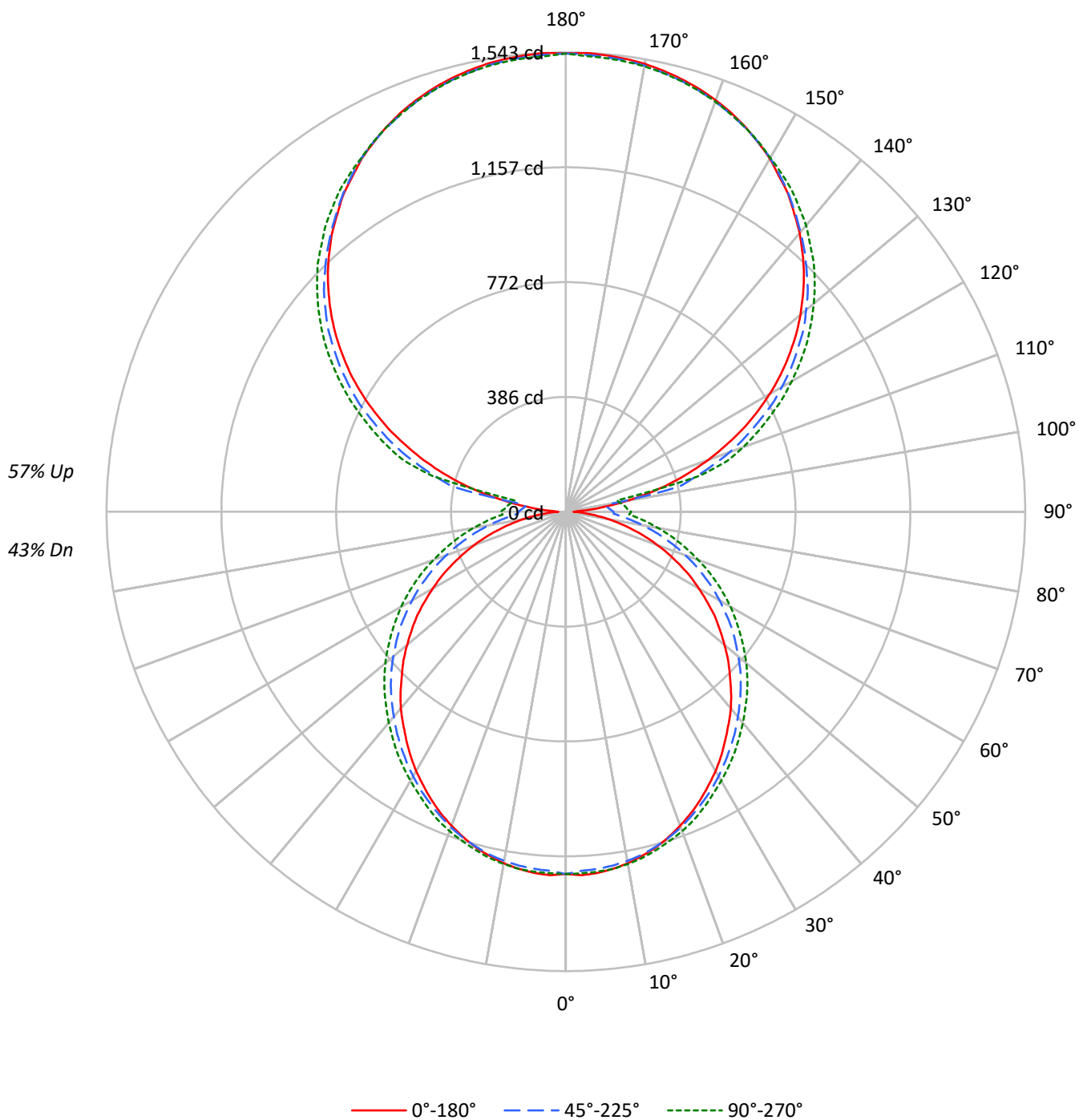
Lumens per Lamp: N/A
Luminaire Lumens: 8914.0 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	9921	9921	9921
5°	9948	9663	9680
10°	9884	9472	9445
15°	9791	9259	9181
20°	9654	9027	8923
25°	9499	8772	8646
30°	9333	8519	8363
35°	9144	8261	8111
40°	8992	8012	7851
45°	8768	7780	7620
50°	8577	7515	7378
55°	8379	7260	7098
60°	8072	6942	6834
65°	7734	6601	6517
70°	7324	6209	6151
75°	6752	5776	5802
80°	6108	5332	5436
85°	5254	4887	5140

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8768 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	1.3
10°-20°	330.3	3.7
20°-30°	499.4	5.6
30°-40°	604.2	6.8
40°-50°	638.7	7.2
50°-60°	601.1	6.7
60°-70°	498.8	5.6
70°-80°	350.0	3.9
80°-90°	200.5	2.2
90°-100°	168.6	1.9
100°-110°	423.5	4.8
110°-120°	700.9	7.9
120°-130°	848.5	9.5
130°-140°	886.8	9.9
140°-150°	818.7	9.2
150°-160°	658.0	7.4
160°-170°	424.3	4.8
170°-180°	146.2	1.6
0°-30°	945.0	10.6
0°-40°	1549.1	17.4
0°-60°	2789.0	31.3
0°-90°	3838.4	43.1
90°-120°	1292.9	14.5
90°-150°	3847.0	43.2
90°-180°	5076.0	56.9
0°-180°	8914.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1218	1214	1204	1215	1214	116
15°	1168	1169	1165	1177	1176	329
25°	1068	1076	1080	1095	1097	492
35°	935	951	965	984	988	585
45°	779	805	831	854	861	602
55°	610	639	680	707	715	544
65°	422	466	512	546	557	419
75°	234	285	342	380	392	249
85°	72	129	191	232	245	75
90°	25	92	160	207	220	18
95°	81	87	144	188	201	92
105°	359	393	449	494	463	377
115°	655	671	713	746	755	645
125°	915	918	950	979	989	817
135°	1131	1130	1144	1168	1178	872
145°	1302	1304	1304	1314	1321	814
155°	1426	1428	1424	1429	1425	658
165°	1505	1499	1499	1508	1498	425
175°	1539	1532	1533	1544	1530	147
180°	1539	1539	1539	1539	1539	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1216.6	1216.6	1216.6	1216.6	1216.6
2.5°	1222.1	1218.0	1207.1	1216.6	1215.3
5°	1218.0	1213.9	1204.4	1215.3	1213.9
7.5°	1209.8	1207.1	1198.9	1211.2	1209.8
10°	1198.9	1197.6	1190.7	1203.0	1201.6
12.5°	1183.9	1183.9	1179.8	1190.7	1190.7
15°	1167.6	1168.9	1164.9	1177.1	1175.8
17.5°	1145.8	1149.9	1148.5	1160.8	1159.4
20°	1122.6	1126.7	1128.1	1141.7	1141.7
22.5°	1096.7	1102.2	1104.9	1118.5	1121.3
25°	1068.1	1076.3	1080.4	1095.4	1096.7
27.5°	1036.8	1049.1	1054.5	1068.1	1069.5
30°	1005.5	1016.4	1025.9	1040.9	1043.6
32.5°	971.4	985.0	995.9	1013.6	1016.4
35°	934.6	951.0	964.6	983.7	987.7
37.5°	897.8	916.9	933.3	952.3	956.4
40°	862.4	880.1	899.2	919.6	925.1
42.5°	821.5	842.0	865.1	888.3	892.4
45°	779.3	805.2	831.1	854.2	861.0
47.5°	739.8	765.7	795.6	818.8	827.0
50°	696.2	726.2	756.1	783.4	791.6
52.5°	652.6	682.6	718.0	745.2	753.4
55°	610.4	639.0	679.8	707.1	715.3
57.5°	562.7	598.1	637.6	670.3	677.1
60°	516.4	551.8	596.7	628.1	639.0
62.5°	471.4	510.9	555.9	587.2	598.1
65°	422.3	465.9	512.3	546.3	557.2
67.5°	376.0	422.3	471.4	505.5	516.4
70°	328.3	374.7	426.4	463.2	472.8
72.5°	282.0	329.7	385.6	421.0	431.9
75°	234.3	284.7	342.0	380.1	392.4
77.5°	189.4	242.5	302.5	340.6	354.2
80°	148.5	203.0	262.9	303.8	314.7
82.5°	107.6	164.9	224.8	267.0	279.3
85°	72.2	129.4	190.7	231.6	245.2
87.5°	45.0	100.8	160.8	200.3	212.5
90°	25.3	92.4	160.2	206.6	219.8
92.5°	37.7	83.1	150.9	196.0	206.9
95°	81.0	86.9	143.8	187.5	201.0
97.5°	137.2	202.1	137.0	178.2	191.6
100°	203.8	259.9	154.2	171.4	182.1
102.5°	279.8	323.6	389.1	165.6	176.5
105°	358.8	392.9	449.1	493.5	463.0
107.5°	433.7	460.2	516.0	555.8	569.9
110°	508.2	530.8	585.4	619.0	633.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	580.5	603.8	651.0	679.9	695.4
115°	655.2	670.8	713.3	745.6	755.1
117.5°	723.1	735.8	780.2	807.6	818.5
120°	790.8	799.5	837.8	867.4	876.0
122.5°	855.3	857.6	896.7	925.0	932.3
125°	914.9	918.2	949.9	979.2	988.6
127.5°	973.6	973.4	1006.4	1029.8	1038.2
130°	1028.7	1028.4	1053.7	1079.4	1087.6
132.5°	1080.5	1081.4	1102.4	1126.7	1133.7
135°	1130.9	1129.8	1144.0	1168.1	1178.5
137.5°	1177.0	1175.7	1186.8	1209.5	1215.3
140°	1221.9	1222.9	1226.5	1247.6	1255.6
142.5°	1260.8	1265.5	1265.2	1282.5	1287.9
145°	1302.3	1304.3	1304.3	1313.7	1321.4
147.5°	1334.5	1340.0	1338.9	1341.4	1348.0
150°	1370.2	1373.4	1372.3	1372.3	1373.4
152.5°	1398.7	1402.2	1399.9	1402.2	1401.1
155°	1426.4	1427.5	1424.1	1428.7	1425.2
157.5°	1450.6	1450.6	1445.9	1451.7	1445.9
160°	1471.3	1467.8	1466.7	1473.6	1466.7
162.5°	1489.7	1485.1	1483.9	1490.8	1482.8
165°	1504.7	1498.9	1498.9	1508.1	1497.8
167.5°	1517.3	1511.6	1510.4	1520.8	1509.3
170°	1527.7	1520.8	1521.9	1531.1	1519.6
172.5°	1534.6	1527.7	1528.8	1538.0	1525.4
175°	1539.2	1532.3	1533.4	1543.8	1530.0
177.5°	1542.7	1534.6	1536.9	1546.1	1532.3
180°	1539.2	1539.2	1539.2	1539.2	1539.2

(END OF REPORT)