

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: P1024879

Luminaire Tested: S124DIP-B1020D1205UB40-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024879
REPORT IS A COMBINATION OF REPORTS P995224 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1205UB40-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

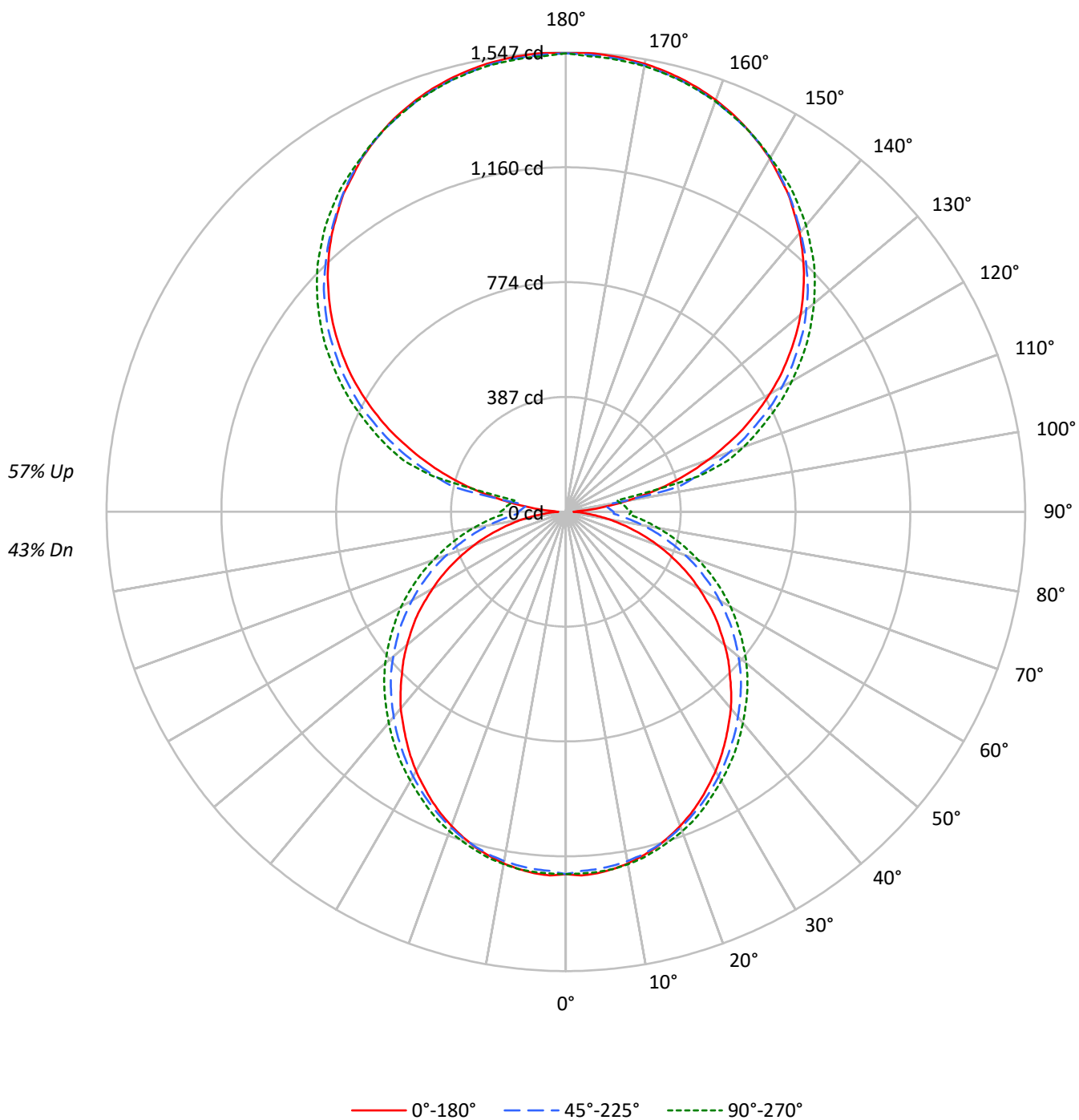
Lumens per Lamp: N/A
Luminaire Lumens: 8941.0 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1024879

CATALOG NUMBER: S124DIP-B1020D1205UB40-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1024879

CATALOG NUMBER: S124DIP-B1020D1205UB40-4F0-XX-W2A-D

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°	9952	9952	9952
5°	9979	9692	9710
10°	9915	9502	9475
15°	9822	9287	9209
20°	9684	9055	8951
25°	9530	8800	8673
30°	9362	8546	8390
35°	9172	8286	8137
40°	9020	8037	7876
45°	8795	7804	7644
50°	8604	7539	7400
55°	8405	7283	7120
60°	8097	6965	6856
65°	7759	6622	6538
70°	7349	6230	6169
75°	6775	5792	5820
80°	6128	5350	5453
85°	5268	4902	5156

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8795 cd/sqm

TEST NUMBER: P1024879

CATALOG NUMBER: S124DIP-B1020D1205UB40-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.6	1.3
10°-20°	331.3	3.7
20°-30°	501.0	5.6
30°-40°	606.1	6.8
40°-50°	640.7	7.2
50°-60°	603.0	6.7
60°-70°	500.4	5.6
70°-80°	351.1	3.9
80°-90°	201.1	2.2
90°-100°	169.1	1.9
100°-110°	424.7	4.8
110°-120°	703.0	7.9
120°-130°	851.0	9.5
130°-140°	889.4	9.9
140°-150°	821.1	9.2
150°-160°	659.9	7.4
160°-170°	425.6	4.8
170°-180°	146.7	1.6
0°-30°	947.9	10.6
0°-40°	1554.0	17.4
0°-60°	2797.7	31.3
0°-90°	3850.4	43.1
90°-120°	1296.8	14.5
90°-150°	3858.4	43.2
90°-180°	5091.0	56.9
0°-180°	8941.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1220	1220	1220	1220	1220	
5°	1222	1218	1208	1219	1218	116
15°	1171	1173	1168	1181	1179	330
25°	1072	1080	1084	1099	1100	494
35°	938	954	968	987	991	587
45°	782	808	834	857	864	604
55°	612	641	682	709	718	546
65°	424	467	514	548	559	420
75°	235	286	343	381	394	250
85°	72	130	191	232	246	75
90°	25	93	161	207	220	18
95°	81	87	144	188	202	92
105°	360	394	450	495	464	378
115°	657	673	715	748	757	647
125°	918	921	953	982	992	820
135°	1134	1133	1147	1172	1182	874
145°	1306	1308	1308	1318	1325	816
155°	1431	1432	1428	1433	1429	660
165°	1509	1503	1503	1512	1502	426
175°	1544	1537	1538	1548	1534	147
180°	1544	1544	1544	1544	1544	

TEST NUMBER: P1024879

CATALOG NUMBER: S124DIP-B1020D1205UB40-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1220.4	1220.4	1220.4	1220.4	1220.4
2.5°	1225.9	1221.8	1210.9	1220.4	1219.1
5°	1221.8	1217.7	1208.1	1219.1	1217.7
7.5°	1213.6	1210.9	1202.7	1215.0	1213.6
10°	1202.7	1201.3	1194.5	1206.8	1205.4
12.5°	1187.6	1187.6	1183.5	1194.5	1194.5
15°	1171.2	1172.6	1168.5	1180.8	1179.4
17.5°	1149.4	1153.5	1152.1	1164.4	1163.0
20°	1126.1	1130.2	1131.6	1145.3	1145.3
22.5°	1100.2	1105.6	1108.4	1122.0	1124.8
25°	1071.5	1079.7	1083.8	1098.8	1100.2
27.5°	1040.0	1052.3	1057.8	1071.5	1072.8
30°	1008.6	1019.5	1029.1	1044.1	1046.9
32.5°	974.4	988.1	999.0	1016.8	1019.5
35°	937.5	953.9	967.6	986.7	990.8
37.5°	900.6	919.8	936.2	955.3	959.4
40°	865.1	882.9	902.0	922.5	928.0
42.5°	824.1	844.6	867.8	891.1	895.2
45°	781.7	807.7	833.7	856.9	863.7
47.5°	742.1	768.1	798.1	821.4	829.6
50°	698.4	728.4	758.5	785.8	794.0
52.5°	654.6	684.7	720.2	747.6	755.8
55°	612.3	641.0	682.0	709.3	717.5
57.5°	564.4	600.0	639.6	672.4	679.2
60°	518.0	553.5	598.6	630.0	641.0
62.5°	472.9	512.5	557.6	589.0	600.0
65°	423.7	467.4	513.9	548.0	559.0
67.5°	377.2	423.7	472.9	507.0	518.0
70°	329.4	375.8	427.8	464.7	474.2
72.5°	282.9	330.7	386.8	422.3	433.2
75°	235.1	285.6	343.0	381.3	393.6
77.5°	190.0	243.3	303.4	341.7	355.3
80°	149.0	203.6	263.8	304.8	315.7
82.5°	108.0	165.4	225.5	267.9	280.2
85°	72.4	129.8	191.3	232.3	246.0
87.5°	45.1	101.1	161.3	200.9	213.2
90°	25.4	92.7	160.7	207.2	220.5
92.5°	37.8	83.3	151.3	196.6	207.5
95°	81.3	87.1	144.3	188.1	201.6
97.5°	137.6	202.6	137.5	178.8	192.2
100°	204.4	260.7	154.7	172.0	182.6
102.5°	280.6	324.5	390.3	166.1	177.0
105°	359.8	394.1	450.4	495.0	464.4
107.5°	434.9	461.6	517.5	557.4	571.6
110°	509.7	532.4	587.1	620.8	635.3

TEST NUMBER: P1024879

CATALOG NUMBER: S124DIP-B1020D1205UB40-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	582.3	605.6	653.0	681.9	697.5
115°	657.1	672.9	715.4	747.8	757.4
117.5°	725.2	738.0	782.5	810.0	820.9
120°	793.1	801.8	840.4	870.0	878.6
122.5°	857.8	860.1	899.3	927.8	935.0
125°	917.6	920.9	952.8	982.1	991.5
127.5°	976.5	976.3	1009.4	1032.8	1041.2
130°	1031.7	1031.5	1056.8	1082.6	1090.8
132.5°	1083.7	1084.6	1105.6	1130.0	1137.1
135°	1134.2	1133.1	1147.3	1171.5	1182.0
137.5°	1180.4	1179.1	1190.3	1213.1	1218.8
140°	1225.4	1226.4	1230.1	1251.3	1259.3
142.5°	1264.5	1269.2	1268.9	1286.2	1291.7
145°	1306.1	1308.2	1308.2	1317.5	1325.3
147.5°	1338.4	1344.0	1342.8	1345.4	1351.9
150°	1374.2	1377.5	1376.3	1376.3	1377.5
152.5°	1402.9	1406.3	1404.0	1406.3	1405.2
155°	1430.6	1431.7	1428.3	1432.9	1429.4
157.5°	1454.8	1454.8	1450.2	1456.0	1450.2
160°	1475.6	1472.1	1471.0	1477.9	1471.0
162.5°	1494.1	1489.5	1488.3	1495.2	1487.1
165°	1509.1	1503.3	1503.3	1512.5	1502.2
167.5°	1521.8	1516.0	1514.9	1525.2	1513.7
170°	1532.2	1525.2	1526.4	1535.6	1524.1
172.5°	1539.1	1532.2	1533.3	1542.6	1529.9
175°	1543.7	1536.8	1537.9	1548.3	1534.5
177.5°	1547.2	1539.1	1541.4	1550.6	1536.8
180°	1543.7	1543.7	1543.7	1543.7	1543.7

(END OF REPORT)