

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: P1013219

Luminaire Tested: S124RDIP-B1020D1205UB2750-4F0-XX-W2A-F_2700K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1013219
REPORT IS A COMBINATION OF REPORTS P998870 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D1205UB2750-4F0-XX-W2A-F_2700K
Description: Define 4 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

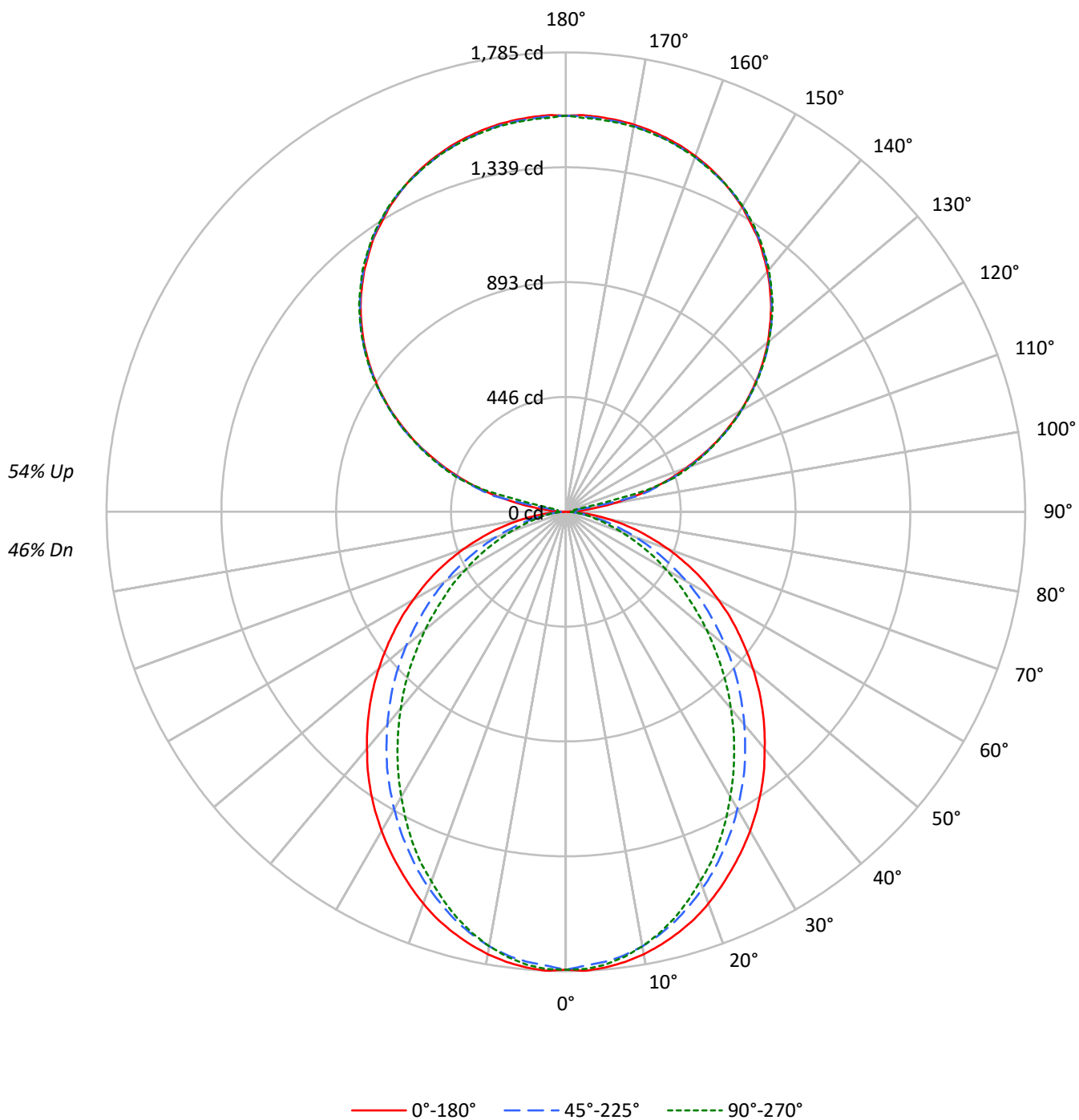
Lumens per Lamp: N/A
Luminaire Lumens: 8878.0 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 81.8
Input Voltage (V): 120
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: P1013219

CATALOG NUMBER: S124RDIP-B1020D1205UB2750-4F0-XX-W2A-F_2700K

Luminous Intensity Polar Plot



TEST NUMBER: P1013219

CATALOG NUMBER: S124RDIP-B1020D1205UB2750-4F0-XX-W2A-F_2700K

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	50	30	10
RCR																				
0	106	106	106	106	98	98	98	98	81	81	81	66	66	66	53	53	53			46
1	97	93	89	86	89	86	82	79	72	69	67	59	57	56	47	46	45			40
2	89	82	76	71	81	75	70	66	63	59	56	52	49	47	42	40	38			34
3	81	72	65	59	74	66	60	55	56	51	47	46	43	40	37	35	33			29
4	74	64	56	50	68	59	52	47	50	45	41	41	37	34	33	31	28			25
5	68	57	49	43	62	53	46	40	45	39	35	37	33	30	30	27	25			22
6	63	51	43	37	58	47	40	35	40	35	31	34	29	26	27	24	22			19
7	58	46	38	33	53	43	36	31	36	31	27	31	26	23	25	22	20			17
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18			15
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	21	18	16			14
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15			13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14512	14512	14512
5°	14513	14081	14082
10°	14391	13636	13474
15°	14192	13083	12757
20°	13933	12452	11939
25°	13610	11772	11140
30°	13293	11077	10243
35°	12945	10374	9366
40°	12531	9616	8466
45°	12142	8865	7573
50°	11701	8044	6668
55°	11223	7203	5733
60°	10692	6309	4810
65°	10182	5286	3920
70°	9455	4207	2996
75°	8521	3060	2095
80°	7119	1880	1506
85°	5356	1081	828

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12142 cd/sqm

TEST NUMBER: P1013219

CATALOG NUMBER: S124RDIP-B1020D1205UB2750-4F0-XX-W2A-F_2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.3	1.9
10°-20°	466.6	5.3
20°-30°	673.6	7.6
30°-40°	763.5	8.6
40°-50°	737.1	8.3
50°-60°	612.8	6.9
60°-70°	423.0	4.8
70°-80°	213.7	2.4
80°-90°	57.4	0.6
90°-100°	51.1	0.6
100°-110°	336.5	3.8
110°-120°	642.5	7.2
120°-130°	815.7	9.2
130°-140°	872.6	9.8
140°-150°	815.9	9.2
150°-160°	658.0	7.4
160°-170°	424.3	4.8
170°-180°	146.2	1.6
0°-30°	1307.6	14.7
0°-40°	2071.0	23.3
0°-60°	3421.0	38.5
0°-90°	4115.2	46.4
90°-120°	1030.1	11.6
90°-150°	3534.3	39.8
90°-180°	4763.0	53.6
0°-180°	8878.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1780	1780	1780	1780	1780	
5°	1777	1771	1755	1769	1766	169
15°	1692	1680	1646	1643	1634	477
25°	1530	1506	1450	1427	1413	705
35°	1323	1280	1211	1165	1140	827
45°	1079	1029	947	880	856	832
55°	818	763	674	604	578	731
65°	556	497	410	352	335	549
75°	296	245	181	150	142	312
85°	74	46	42	40	40	81
90°	4	16	25	32	34	8
95°	63	24	25	32	33	78
105°	346	353	359	370	328	363
115°	647	650	649	652	652	637
125°	910	914	912	915	916	812
135°	1128	1127	1132	1134	1136	869
145°	1301	1304	1304	1306	1308	813
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	



TEST NUMBER: P1013219

CATALOG NUMBER: S124RDIP-B1020D1205UB2750-4F0-XX-W2A-F_2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1779.6	1779.6	1779.6	1779.6	1779.6
2.5°	1785.1	1779.6	1764.6	1779.6	1778.3
5°	1776.9	1771.4	1755.1	1768.7	1766.0
7.5°	1764.6	1759.2	1738.7	1748.3	1744.2
10°	1745.6	1738.7	1714.2	1719.7	1714.2
12.5°	1721.0	1712.8	1682.9	1685.6	1677.4
15°	1692.4	1680.1	1646.1	1643.4	1633.8
17.5°	1659.7	1642.0	1602.5	1595.7	1582.0
20°	1620.2	1602.5	1556.1	1545.2	1527.5
22.5°	1576.6	1556.1	1505.7	1488.0	1474.4
25°	1530.3	1505.7	1449.9	1426.7	1413.1
27.5°	1482.6	1452.6	1394.0	1366.7	1347.7
30°	1432.1	1398.1	1334.0	1300.0	1278.2
32.5°	1379.0	1339.5	1272.7	1231.8	1211.4
35°	1323.1	1279.5	1211.4	1165.1	1140.5
37.5°	1264.5	1219.6	1144.6	1094.2	1069.7
40°	1201.9	1156.9	1079.2	1022.0	997.5
42.5°	1141.9	1094.2	1012.4	953.9	928.0
45°	1079.2	1028.8	947.0	880.3	855.7
47.5°	1015.2	963.4	878.9	809.4	782.2
50°	949.8	896.6	809.4	741.3	715.4
52.5°	883.0	831.2	741.3	671.8	644.5
55°	817.6	763.1	674.5	603.7	577.8
57.5°	753.5	696.3	609.1	536.9	517.8
60°	684.0	629.5	542.3	471.5	449.7
62.5°	621.4	564.1	474.2	410.2	393.8
65°	556.0	497.4	410.2	351.6	335.2
67.5°	487.8	432.0	350.2	298.4	279.3
70°	423.8	366.6	288.9	243.9	230.3
72.5°	355.7	305.2	233.0	196.2	184.0
75°	295.7	245.3	181.2	149.9	141.7
77.5°	233.0	189.4	134.9	113.1	110.4
80°	173.1	133.5	92.7	88.6	87.2
82.5°	121.3	85.8	66.8	64.0	62.7
85°	73.6	46.3	42.2	39.5	39.5
87.5°	31.3	20.4	19.1	17.7	19.1
90°	3.5	16.1	25.3	32.2	34.5
92.5°	17.3	15.0	24.2	31.1	31.1
95°	63.3	24.2	25.3	32.2	33.4
97.5°	120.9	146.2	25.3	31.1	32.2
100°	188.8	209.5	50.7	31.1	32.2
102.5°	264.8	278.6	292.4	33.4	33.4
105°	346.5	353.4	359.2	369.5	328.1
107.5°	421.4	424.8	432.9	438.6	443.2
110°	497.3	500.8	507.7	510.0	513.4

TEST NUMBER: P1013219

CATALOG NUMBER: S124RDIP-B1020D1205UB2750-4F0-XX-W2A-F_2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	571.0	577.9	580.2	579.1	583.7
115°	647.0	650.4	649.3	651.6	651.6
117.5°	714.9	719.5	723.0	721.8	721.8
120°	784.0	788.6	787.4	789.7	787.4
122.5°	848.5	850.8	853.1	854.2	851.9
125°	909.5	914.1	911.8	915.2	916.4
127.5°	968.2	969.3	975.1	973.9	972.8
130°	1024.6	1025.7	1029.2	1030.4	1030.4
132.5°	1076.4	1078.7	1083.3	1084.5	1083.3
135°	1128.2	1127.1	1131.7	1134.0	1136.3
137.5°	1174.3	1174.3	1180.0	1182.3	1181.2
140°	1219.2	1221.5	1223.8	1227.2	1228.4
142.5°	1259.4	1264.1	1265.2	1267.5	1267.5
145°	1300.9	1304.3	1304.3	1305.5	1307.8
147.5°	1333.1	1340.0	1338.9	1340.0	1341.2
150°	1368.8	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)