

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: P1024855

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024855
REPORT IS A COMBINATION OF REPORTS P995185 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-F
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

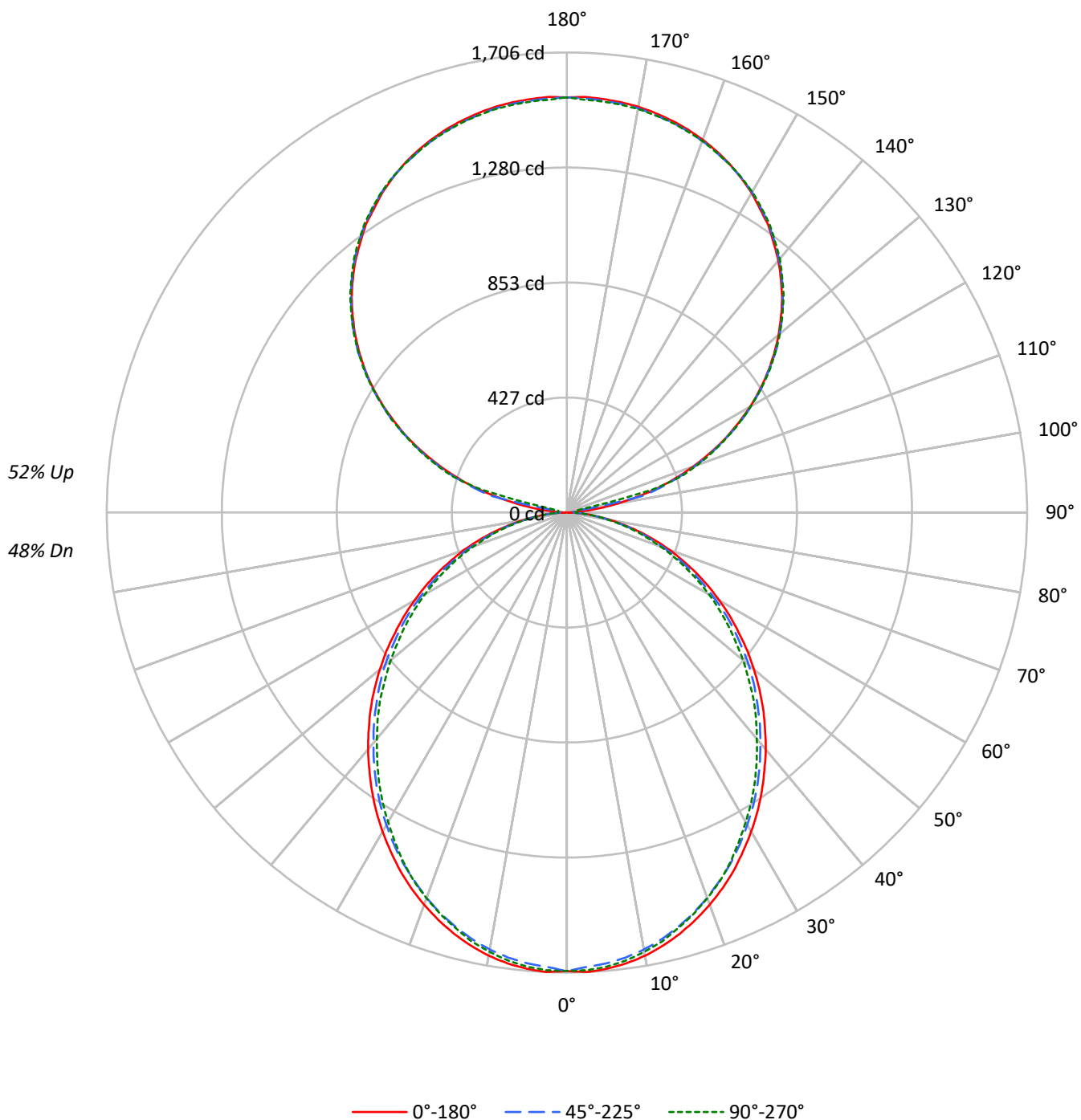
Lumens per Lamp: N/A
Luminaire Lumens: 9130.0 lumens
Efficiency: N/A
Efficacy: 111.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54
1	97	93	89	86	89	86	82	79	72	70	67	59	58	56	48	47	46
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	42	40	38
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	37	35	33
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28
5	68	56	48	42	62	52	45	40	44	39	34	37	33	29	30	27	25
6	62	50	42	36	57	47	40	34	40	34	30	33	29	26	27	24	22
7	58	45	38	32	53	42	35	30	36	30	26	30	26	23	25	22	19
8	54	41	34	28	49	38	31	27	33	27	23	28	23	20	23	20	17
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	16
10	47	35	27	23	43	32	26	21	28	23	19	24	19	16	20	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13864	13864	13864
5°	13876	13466	13482
10°	13758	13091	13000
15°	13561	12648	12456
20°	13310	12167	11894
25°	13026	11658	11288
30°	12684	11109	10623
35°	12329	10547	9980
40°	11960	9942	9296
45°	11573	9336	8657
50°	11144	8747	7948
55°	10678	8061	7246
60°	10201	7308	6513
65°	9655	6530	5688
70°	9027	5595	4803
75°	8086	4509	3847
80°	6893	3261	2707
85°	5356	1814	1457

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11573 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.3	1.8
10°-20°	451.5	4.9
20°-30°	664.5	7.3
30°-40°	772.4	8.5
40°-50°	772.3	8.5
50°-60°	675.5	7.4
60°-70°	501.5	5.5
70°-80°	284.5	3.1
80°-90°	84.7	0.9
90°-100°	51.1	0.6
100°-110°	336.5	3.7
110°-120°	642.5	7.0
120°-130°	815.7	8.9
130°-140°	872.6	9.6
140°-150°	815.9	8.9
150°-160°	658.0	7.2
160°-170°	424.3	4.6
170°-180°	146.2	1.6
0°-30°	1276.2	14.0
0°-40°	2048.6	22.4
0°-60°	3496.5	38.3
0°-90°	4367.2	47.8
90°-120°	1030.1	11.3
90°-150°	3534.3	38.7
90°-180°	4763.0	52.2
0°-180°	9130.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1700	1700	1700	1700	1700	
5°	1699	1693	1678	1693	1691	161
15°	1617	1612	1591	1599	1595	456
25°	1465	1455	1436	1437	1432	674
35°	1260	1251	1232	1222	1215	788
45°	1029	1019	997	982	978	793
55°	778	774	755	738	730	697
65°	527	520	507	493	486	522
75°	281	274	267	262	260	298
85°	74	74	71	71	70	79
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1700.2	1700.2	1700.2	1700.2	1700.2
2.5°	1705.7	1701.6	1686.6	1700.2	1698.9
5°	1698.9	1693.4	1678.4	1693.4	1690.7
7.5°	1686.6	1681.2	1664.8	1677.1	1675.7
10°	1668.9	1663.5	1645.7	1656.6	1653.9
12.5°	1645.7	1640.3	1621.2	1633.5	1629.4
15°	1617.1	1611.7	1591.3	1599.4	1595.3
17.5°	1584.4	1577.6	1558.6	1564.0	1561.3
20°	1547.7	1540.8	1520.4	1524.5	1521.8
22.5°	1508.1	1498.6	1478.2	1486.3	1480.9
25°	1464.6	1455.0	1435.9	1437.3	1431.9
27.5°	1415.5	1406.0	1388.3	1385.5	1378.7
30°	1366.5	1355.6	1337.8	1332.4	1325.6
32.5°	1314.7	1305.2	1286.1	1279.3	1272.5
35°	1260.2	1250.7	1231.6	1222.0	1215.2
37.5°	1203.0	1194.8	1174.4	1164.8	1155.3
40°	1147.1	1136.2	1115.8	1102.2	1095.3
42.5°	1087.2	1081.7	1058.6	1042.2	1038.1
45°	1028.6	1019.1	997.3	982.3	978.2
47.5°	967.3	960.5	940.0	923.7	912.8
50°	904.6	899.2	880.1	861.0	852.8
52.5°	843.3	836.5	816.1	799.7	788.8
55°	777.9	773.8	754.8	738.4	730.2
57.5°	716.6	712.5	693.4	677.1	668.9
60°	652.6	645.8	628.1	615.8	609.0
62.5°	589.9	584.5	565.4	554.5	547.7
65°	527.2	520.4	506.8	493.2	486.4
67.5°	463.2	457.8	444.1	430.5	429.1
70°	404.6	395.1	384.2	373.3	369.2
72.5°	342.0	332.4	324.2	316.1	312.0
75°	280.6	273.8	267.0	261.6	260.2
77.5°	220.7	218.0	211.2	209.8	205.7
80°	167.6	163.5	160.8	158.0	156.7
82.5°	115.8	114.4	114.4	113.1	111.7
85°	73.6	73.6	70.8	70.8	69.5
87.5°	35.4	34.1	32.7	32.7	32.7
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

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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)