

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: P1025986

Luminaire Tested: S124RDIP-B1020D1205UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025986
REPORT IS A COMBINATION OF REPORTS P998896 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D1205UB50-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

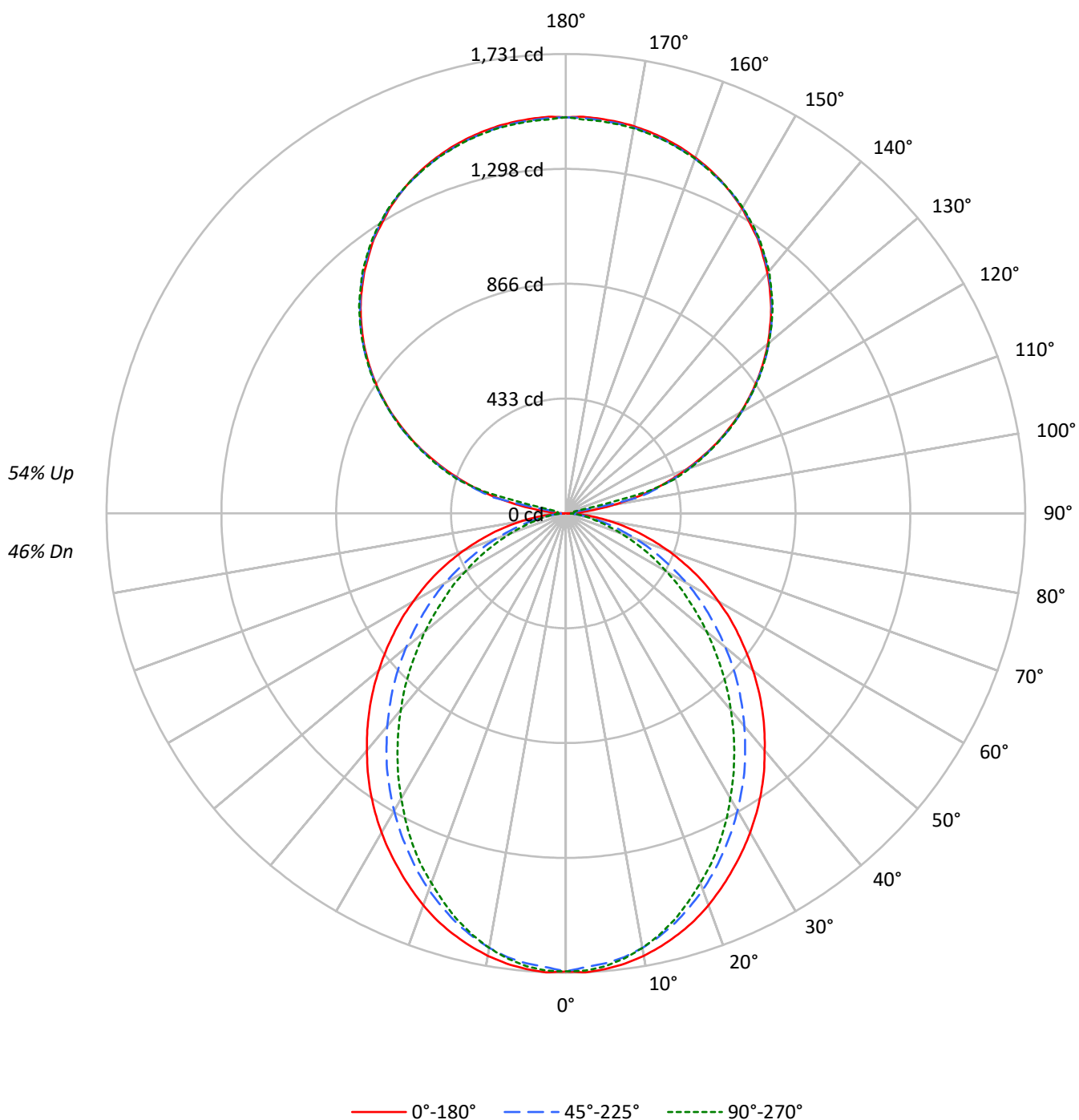
Lumens per Lamp: N/A
Luminaire Lumens: 8610.0 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 81.8
Input Voltage (V):
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	106	106	106	106	98	98	98	98	81	81	81	66	66	66	53	53	53
1	97	93	89	86	89	86	82	79	72	69	67	59	57	56	47	46	45
2	89	82	76	71	81	75	70	66	63	59	56	52	49	47	42	40	38
3	81	72	65	59	74	66	60	55	56	51	47	46	43	40	37	35	33
4	74	64	56	50	68	59	52	47	50	45	41	41	37	34	33	31	28
5	68	57	49	43	62	53	46	40	45	39	35	37	33	30	30	27	25
6	63	51	43	37	58	47	40	35	40	35	31	34	29	26	27	24	22
7	58	46	38	33	53	43	36	31	36	31	27	31	26	23	25	22	20
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	21	18	16
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14075	14075	14075
5°	14076	13656	13657
10°	13956	13225	13068
15°	13765	12688	12372
20°	13513	12077	11579
25°	13199	11417	10804
30°	12893	10744	9934
35°	12554	10062	9084
40°	12153	9327	8210
45°	11776	8598	7345
50°	11347	7802	6466
55°	10884	6986	5560
60°	10370	6120	4664
65°	9875	5126	3802
70°	9169	4080	2905
75°	8265	2969	2032
80°	6901	1823	1461
85°	5196	1051	803

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11776 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.3	1.9
10°-20°	452.5	5.3
20°-30°	653.3	7.6
30°-40°	740.4	8.6
40°-50°	714.9	8.3
50°-60°	594.3	6.9
60°-70°	410.2	4.8
70°-80°	207.3	2.4
80°-90°	55.7	0.6
90°-100°	49.5	0.6
100°-110°	326.3	3.8
110°-120°	623.1	7.2
120°-130°	791.0	9.2
130°-140°	846.2	9.8
140°-150°	791.3	9.2
150°-160°	638.1	7.4
160°-170°	411.5	4.8
170°-180°	141.8	1.6
0°-30°	1268.1	14.7
0°-40°	2008.6	23.3
0°-60°	3317.8	38.5
0°-90°	3991.1	46.4
90°-120°	999.0	11.6
90°-150°	3427.5	39.8
90°-180°	4619.0	53.6
0°-180°	8610.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1726	1726	1726	1726	1726	
5°	1723	1718	1702	1715	1713	164
15°	1641	1630	1596	1594	1584	463
25°	1484	1460	1406	1384	1370	684
35°	1283	1241	1175	1130	1106	802
45°	1047	998	918	854	830	807
55°	793	740	654	585	560	709
65°	539	482	398	341	325	532
75°	287	238	176	145	137	302
85°	71	45	41	38	38	78
90°	3	16	25	31	34	7
95°	61	23	25	31	32	76
105°	336	343	348	358	318	352
115°	627	631	630	632	632	618
125°	882	886	884	888	889	788
135°	1094	1093	1098	1100	1102	843
145°	1262	1265	1265	1266	1268	788
155°	1383	1384	1381	1386	1382	638
165°	1459	1454	1454	1462	1452	412
175°	1493	1486	1487	1497	1484	142
180°	1493	1493	1493	1493	1493	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1726.0	1726.0	1726.0	1726.0	1726.0
2.5°	1731.2	1726.0	1711.4	1726.0	1724.6
5°	1723.3	1718.0	1702.2	1715.4	1712.7
7.5°	1711.4	1706.1	1686.3	1695.6	1691.6
10°	1692.9	1686.3	1662.5	1667.8	1662.5
12.5°	1669.1	1661.2	1632.1	1634.8	1626.8
15°	1641.4	1629.5	1596.4	1593.8	1584.5
17.5°	1609.7	1592.5	1554.2	1547.5	1534.3
20°	1571.3	1554.2	1509.2	1498.6	1481.5
22.5°	1529.0	1509.2	1460.3	1443.1	1429.9
25°	1484.1	1460.3	1406.1	1383.7	1370.5
27.5°	1437.9	1408.8	1352.0	1325.5	1307.0
30°	1389.0	1355.9	1293.8	1260.8	1239.6
32.5°	1337.4	1299.1	1234.3	1194.7	1174.9
35°	1283.2	1240.9	1174.9	1129.9	1106.1
37.5°	1226.4	1182.8	1110.1	1061.2	1037.4
40°	1165.6	1122.0	1046.7	991.2	967.4
42.5°	1107.5	1061.2	981.9	925.1	900.0
45°	1046.7	997.8	918.5	853.7	829.9
47.5°	984.6	934.3	852.4	785.0	758.6
50°	921.1	869.6	785.0	718.9	693.8
52.5°	856.4	806.2	718.9	651.5	625.1
55°	792.9	740.1	654.2	585.4	560.3
57.5°	730.8	675.3	590.7	520.7	502.2
60°	663.4	610.6	526.0	457.3	436.1
62.5°	602.6	547.1	459.9	397.8	381.9
65°	539.2	482.4	397.8	341.0	325.1
67.5°	473.1	418.9	339.6	289.4	270.9
70°	411.0	355.5	280.2	236.6	223.3
72.5°	344.9	296.0	226.0	190.3	178.4
75°	286.8	237.9	175.8	145.4	137.4
77.5°	226.0	183.7	130.8	109.7	107.0
80°	167.8	129.5	89.9	85.9	84.6
82.5°	117.6	83.3	64.8	62.1	60.8
85°	71.4	44.9	41.0	38.3	38.3
87.5°	30.4	19.8	18.5	17.2	18.5
90°	3.3	15.6	24.6	31.3	33.5
92.5°	16.7	14.5	23.4	30.1	30.1
95°	61.4	23.4	24.6	31.3	32.4
97.5°	117.2	141.8	24.6	30.1	31.3
100°	183.1	203.2	49.1	30.1	31.3
102.5°	256.8	270.2	283.6	32.4	32.4
105°	336.1	342.7	348.3	358.4	318.2
107.5°	408.6	412.0	419.8	425.4	429.8
110°	482.3	485.7	492.4	494.6	497.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	553.8	560.5	562.7	561.6	566.0
115°	627.4	630.8	629.7	631.9	631.9
117.5°	693.3	697.8	701.1	700.0	700.0
120°	760.3	764.8	763.7	765.9	763.7
122.5°	822.8	825.1	827.3	828.4	826.2
125°	882.0	886.5	884.2	887.6	888.7
127.5°	938.9	940.1	945.6	944.5	943.4
130°	993.6	994.8	998.1	999.2	999.2
132.5°	1043.9	1046.1	1050.6	1051.7	1050.6
135°	1094.1	1093.0	1097.5	1099.7	1101.9
137.5°	1138.8	1138.8	1144.4	1146.6	1145.5
140°	1182.3	1184.6	1186.8	1190.1	1191.3
142.5°	1221.4	1225.9	1227.0	1229.2	1229.2
145°	1261.6	1264.9	1264.9	1266.1	1268.3
147.5°	1292.8	1299.5	1298.4	1299.5	1300.7
150°	1327.5	1331.9	1330.8	1330.8	1331.9
152.5°	1356.5	1359.8	1357.6	1359.8	1358.7
155°	1383.3	1384.4	1381.0	1385.5	1382.2
157.5°	1406.7	1406.7	1402.3	1407.8	1402.3
160°	1426.8	1423.5	1422.4	1429.1	1422.4
162.5°	1444.7	1440.2	1439.1	1445.8	1438.0
165°	1459.2	1453.6	1453.6	1462.5	1452.5
167.5°	1471.5	1465.9	1464.8	1474.8	1463.7
170°	1481.5	1474.8	1475.9	1484.9	1473.7
172.5°	1488.2	1481.5	1482.6	1491.6	1479.3
175°	1492.7	1486.0	1487.1	1497.2	1483.8
177.5°	1496.0	1488.2	1490.5	1499.4	1486.0
180°	1492.7	1492.7	1492.7	1492.7	1492.7

(END OF REPORT)