

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: P1025987

Luminaire Tested: S124RDIP-B1020D1205UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025987
REPORT IS A COMBINATION OF REPORTS P998897 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-F1
Description: Define 4 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

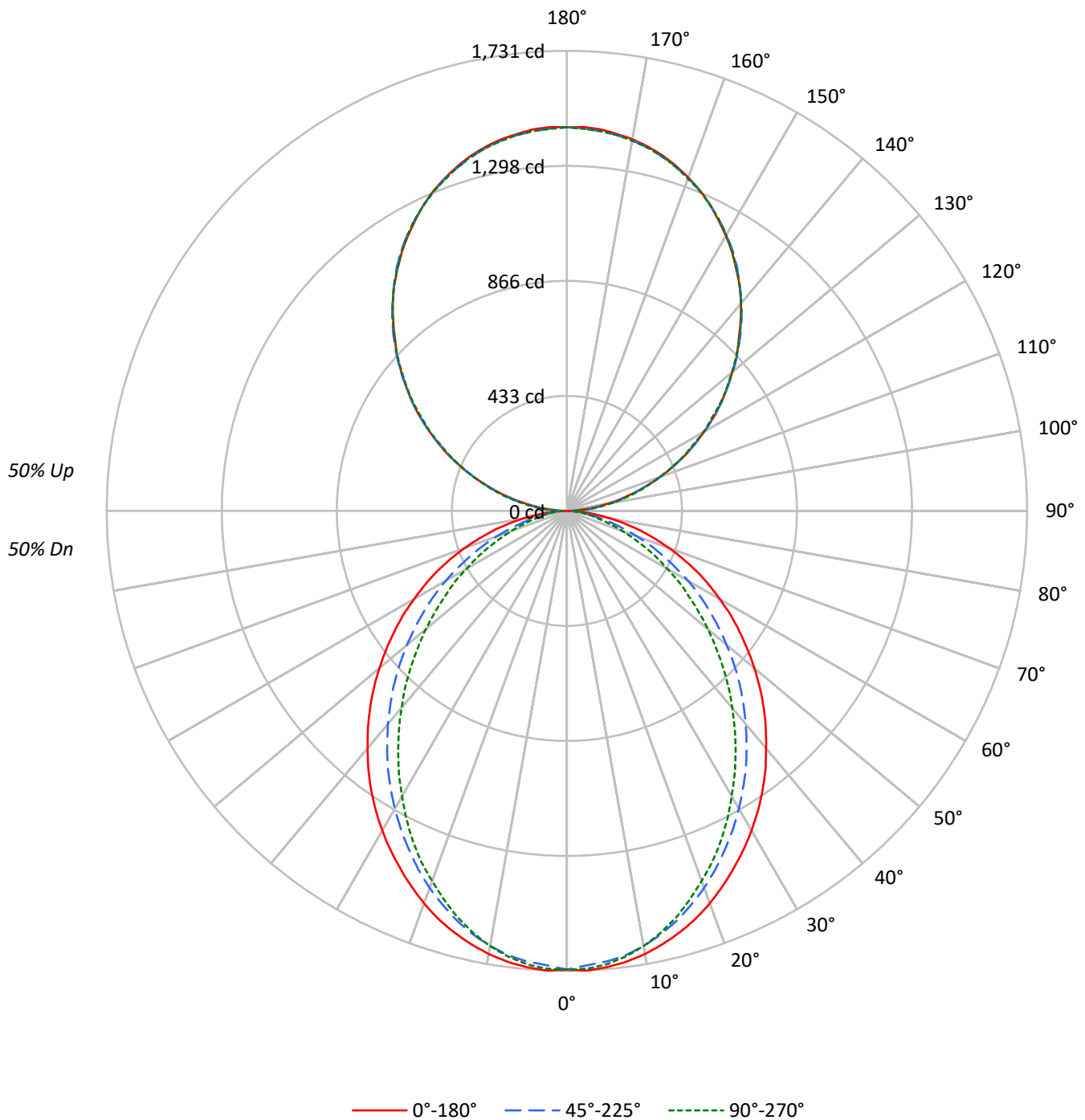
Lumens per Lamp: N/A
Luminaire Lumens: 7996.0 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56
1	98	94	90	87	90	87	83	81	73	71	69	61	60	58	50	49	48
2	89	82	76	71	82	76	71	67	65	61	58	54	51	49	44	42	41
3	82	72	65	60	75	67	61	56	57	53	49	48	45	42	39	37	35
4	75	64	57	51	69	60	53	48	51	46	42	43	39	36	35	33	30
5	69	57	49	43	63	53	46	41	46	40	36	39	34	31	32	29	27
6	63	52	44	38	58	48	41	36	41	36	32	35	31	27	29	26	23
7	59	47	39	33	54	43	36	31	37	32	28	32	28	24	27	23	21
8	55	42	35	29	50	40	33	28	34	29	25	29	25	22	25	21	19
9	51	39	31	26	47	36	30	25	31	26	22	27	23	20	23	19	17
10	48	36	28	24	44	33	27	22	29	24	20	25	21	18	21	18	16

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	2.0
10°-20°	452.5	5.7
20°-30°	653.3	8.2
30°-40°	740.4	9.3
40°-50°	714.9	8.9
50°-60°	594.3	7.4
60°-70°	410.2	5.1
70°-80°	207.3	2.6
80°-90°	55.7	0.7
90°-100°	94.1	1.2
100°-110°	281.8	3.5
110°-120°	478.7	6.0
120°-130°	631.4	7.9
130°-140°	709.1	8.9
140°-150°	697.0	8.7
150°-160°	586.2	7.3
160°-170°	390.0	4.9
170°-180°	136.6	1.7
0°-30°	1268.1	15.9
0°-40°	2008.6	25.1
0°-60°	3317.8	41.5
0°-90°	3991.1	49.9
90°-120°	854.6	10.7
90°-150°	2892.1	36.2
90°-180°	4005.0	50.1
0°-180°	7996.0	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	9
95°	67	77	85	88	88	73
105°	260	261	266	269	272	276
115°	487	487	484	483	482	480
125°	709	709	708	706	703	632
135°	914	921	921	919	915	707
145°	1111	1115	1116	1115	1112	695
155°	1273	1273	1272	1276	1272	586
165°	1385	1382	1380	1386	1382	391
175°	1441	1436	1434	1442	1434	137
180°	1443	1443	1443	1443	1443	

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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°	29.0	43.5	49.1	52.5	53.6
95°	67.0	77.0	84.8	88.2	88.2
97.5°	107.2	116.1	125.0	129.5	129.5
100°	156.3	160.8	170.8	173.0	173.0
102.5°	207.6	208.8	217.7	221.0	222.1
105°	260.1	261.2	265.7	269.0	272.4
107.5°	314.8	315.9	317.0	321.5	320.4
110°	370.6	372.9	371.7	369.5	372.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	428.7	428.7	426.4	426.4	426.4
115°	486.7	486.7	484.5	483.4	482.3
117.5°	541.4	541.4	540.3	537.0	533.6
120°	596.1	600.6	597.2	591.7	593.9
122.5°	653.0	654.2	653.0	649.7	644.1
125°	708.9	708.9	707.7	705.5	703.3
127.5°	759.1	762.4	760.2	758.0	756.9
130°	812.7	816.0	816.0	813.8	809.3
132.5°	867.4	869.6	868.5	866.3	865.1
135°	914.3	921.0	921.0	918.7	915.4
137.5°	966.7	970.1	972.3	969.0	970.1
140°	1019.2	1021.4	1021.4	1020.3	1019.2
142.5°	1067.2	1069.4	1068.3	1068.3	1068.3
145°	1110.7	1115.2	1116.3	1115.2	1111.9
147.5°	1155.4	1161.0	1159.9	1158.7	1157.6
150°	1195.6	1200.0	1200.0	1200.0	1198.9
152.5°	1233.5	1235.8	1236.9	1240.2	1236.9
155°	1272.6	1272.6	1271.5	1276.0	1271.5
157.5°	1306.1	1303.9	1303.9	1307.2	1303.9
160°	1335.1	1334.0	1332.9	1336.2	1330.7
162.5°	1361.9	1358.6	1357.4	1364.1	1358.6
165°	1385.4	1382.0	1379.8	1386.5	1382.0
167.5°	1404.3	1399.9	1399.9	1406.6	1399.9
170°	1420.0	1414.4	1415.5	1422.2	1414.4
172.5°	1431.1	1426.7	1426.7	1434.5	1426.7
175°	1441.2	1435.6	1434.5	1442.3	1434.5
177.5°	1445.6	1440.1	1440.1	1447.9	1438.9
180°	1443.4	1443.4	1443.4	1443.4	1443.4

(END OF REPORT)