

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: P1025981

Luminaire Tested: S124RDIP-B1020D1205UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025981
REPORT IS A COMBINATION OF REPORTS P998891 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D1205UB40-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

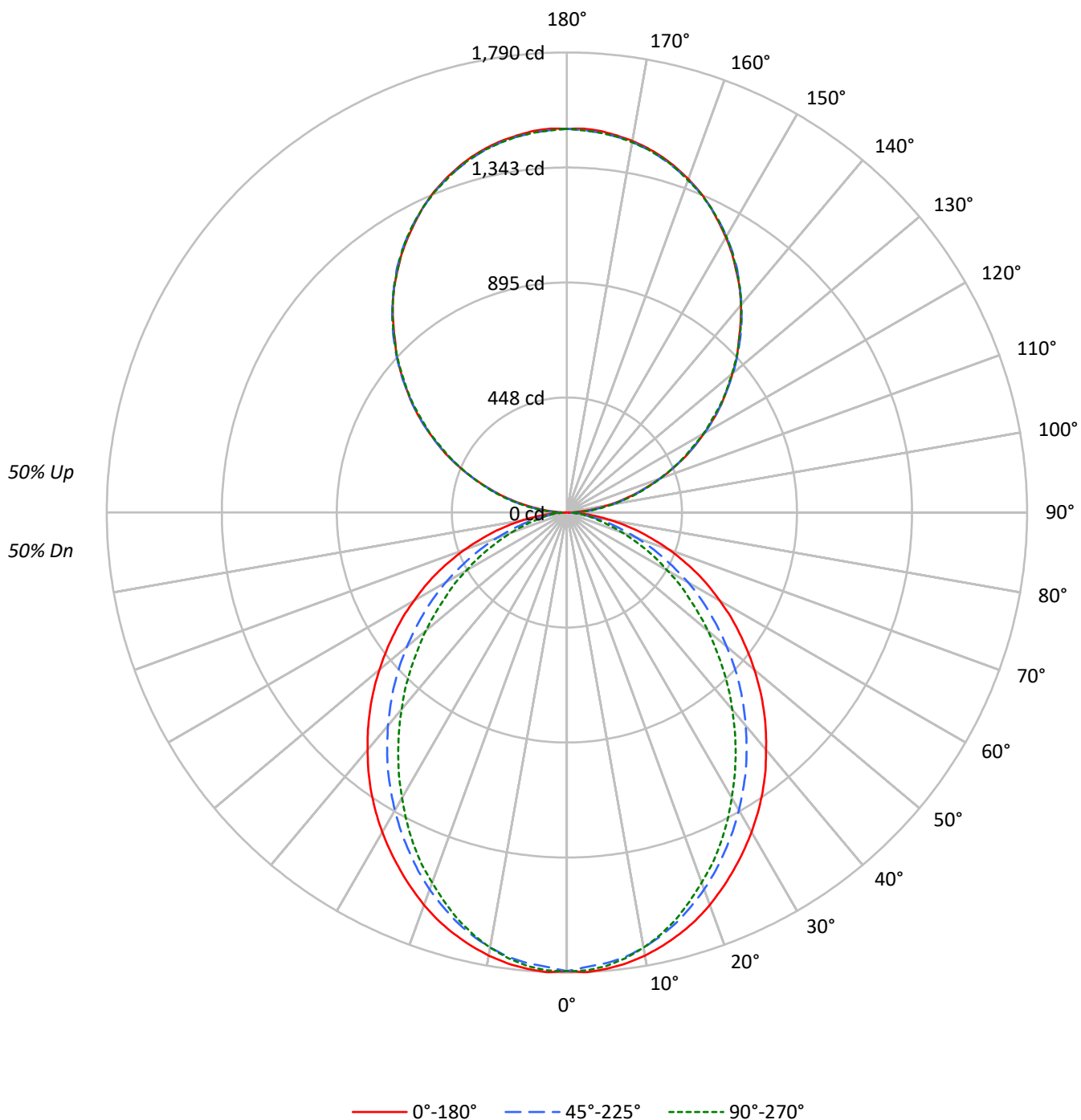
Lumens per Lamp: N/A
Luminaire Lumens: 8269.0 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	14554	14554	14554
5°	14556	14122	14123
10°	14432	13676	13513
15°	14233	13122	12794
20°	13973	12489	11974
25°	13649	11806	11172
30°	13332	11110	10273
35°	12983	10404	9394
40°	12568	9645	8490
45°	12178	8891	7595
50°	11734	8068	6687
55°	11256	7225	5749
60°	10724	6328	4824
65°	10212	5301	3932
70°	9482	4219	3005
75°	8547	3070	2101
80°	7140	1884	1511
85°	5370	1086	830

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12178 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.8	2.0
10°-20°	467.9	5.7
20°-30°	675.6	8.2
30°-40°	765.7	9.3
40°-50°	739.3	8.9
50°-60°	614.6	7.4
60°-70°	424.2	5.1
70°-80°	214.4	2.6
80°-90°	57.6	0.7
90°-100°	97.3	1.2
100°-110°	291.4	3.5
110°-120°	495.1	6.0
120°-130°	652.9	7.9
130°-140°	733.4	8.9
140°-150°	720.8	8.7
150°-160°	606.2	7.3
160°-170°	403.4	4.9
170°-180°	141.2	1.7
0°-30°	1311.4	15.9
0°-40°	2077.1	25.1
0°-60°	3431.0	41.5
0°-90°	4127.2	49.9
90°-120°	883.8	10.7
90°-150°	2990.9	36.2
90°-180°	4142.0	50.1
0°-180°	8269.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1785	1785	1785	1785	1785	
5°	1782	1777	1760	1774	1771	169
15°	1697	1685	1651	1648	1639	478
25°	1535	1510	1454	1431	1417	707
35°	1327	1283	1215	1168	1144	829
45°	1082	1032	950	883	858	835
55°	820	765	676	605	579	734
65°	558	499	411	353	336	551
75°	297	246	182	150	142	313
85°	74	46	42	40	40	81
90°	4	16	25	32	35	9
95°	69	80	88	91	91	75
105°	269	270	275	278	282	285
115°	503	503	501	500	499	496
125°	733	733	732	730	727	653
135°	946	952	952	950	947	731
145°	1149	1153	1154	1153	1150	719
155°	1316	1316	1315	1320	1315	606
165°	1433	1429	1427	1434	1429	404
175°	1490	1485	1484	1492	1484	142
180°	1493	1493	1493	1493	1493	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1784.8	1784.8	1784.8	1784.8	1784.8
2.5°	1790.3	1784.8	1769.8	1784.8	1783.4
5°	1782.1	1776.6	1760.2	1773.9	1771.1
7.5°	1769.8	1764.3	1743.8	1753.4	1749.3
10°	1750.6	1743.8	1719.2	1724.7	1719.2
12.5°	1726.0	1717.8	1687.8	1690.5	1682.3
15°	1697.3	1685.0	1650.9	1648.2	1638.6
17.5°	1664.5	1646.8	1607.2	1600.3	1586.7
20°	1624.9	1607.2	1560.7	1549.8	1532.0
22.5°	1581.2	1560.7	1510.1	1492.4	1478.7
25°	1534.7	1510.1	1454.1	1430.9	1417.2
27.5°	1486.9	1456.8	1398.1	1370.7	1351.6
30°	1436.3	1402.2	1337.9	1303.8	1281.9
32.5°	1383.0	1343.4	1276.4	1235.4	1214.9
35°	1327.0	1283.3	1214.9	1168.5	1143.9
37.5°	1268.2	1223.1	1148.0	1097.4	1072.8
40°	1205.4	1160.3	1082.4	1025.0	1000.4
42.5°	1145.2	1097.4	1015.4	956.6	930.7
45°	1082.4	1031.8	949.8	882.8	858.2
47.5°	1018.1	966.2	881.5	811.8	784.4
50°	952.5	899.2	811.8	743.4	717.5
52.5°	885.6	833.6	743.4	673.7	646.4
55°	820.0	765.3	676.5	605.4	579.4
57.5°	755.7	698.3	610.9	538.5	519.3
60°	686.0	631.4	543.9	472.9	451.0
62.5°	623.2	565.8	475.6	411.4	395.0
65°	557.6	498.8	411.4	352.6	336.2
67.5°	489.3	433.2	351.2	299.3	280.2
70°	425.0	367.6	289.7	244.6	231.0
72.5°	356.7	306.1	233.7	196.8	184.5
75°	296.6	246.0	181.8	150.3	142.1
77.5°	233.7	190.0	135.3	113.4	110.7
80°	173.6	133.9	92.9	88.8	87.5
82.5°	121.6	86.1	67.0	64.2	62.9
85°	73.8	46.5	42.4	39.6	39.6
87.5°	31.4	20.5	19.1	17.8	19.1
90°	3.5	16.2	25.4	32.3	34.6
92.5°	30.0	45.0	50.8	54.3	55.4
95°	69.3	79.7	87.7	91.2	91.2
97.5°	110.8	120.1	129.3	133.9	133.9
100°	161.6	166.2	176.6	178.9	178.9
102.5°	214.7	215.9	225.1	228.6	229.7
105°	269.0	270.1	274.8	278.2	281.7
107.5°	325.6	326.7	327.9	332.5	331.3
110°	383.3	385.6	384.4	382.1	385.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	443.3	443.3	441.0	441.0	441.0
115°	503.4	503.4	501.0	499.9	498.7
117.5°	559.9	559.9	558.8	555.3	551.8
120°	616.5	621.1	617.6	611.9	614.2
122.5°	675.4	676.5	675.4	671.9	666.1
125°	733.1	733.1	731.9	729.6	727.3
127.5°	785.0	788.5	786.2	783.9	782.7
130°	840.5	843.9	843.9	841.6	837.0
132.5°	897.0	899.3	898.2	895.9	894.7
135°	945.5	952.4	952.4	950.1	946.7
137.5°	999.8	1003.2	1005.6	1002.1	1003.2
140°	1054.0	1056.3	1056.3	1055.2	1054.0
142.5°	1103.7	1106.0	1104.8	1104.8	1104.8
145°	1148.7	1153.3	1154.5	1153.3	1149.9
147.5°	1194.9	1200.7	1199.5	1198.3	1197.2
150°	1236.4	1241.1	1241.1	1241.1	1239.9
152.5°	1275.7	1278.0	1279.2	1282.6	1279.2
155°	1316.1	1316.1	1315.0	1319.6	1315.0
157.5°	1350.7	1348.4	1348.4	1351.9	1348.4
160°	1380.8	1379.6	1378.4	1381.9	1376.1
162.5°	1408.5	1405.0	1403.8	1410.8	1405.0
165°	1432.7	1429.2	1426.9	1433.9	1429.2
167.5°	1452.3	1447.7	1447.7	1454.6	1447.7
170°	1468.5	1462.7	1463.9	1470.8	1462.7
172.5°	1480.0	1475.4	1475.4	1483.5	1475.4
175°	1490.4	1484.7	1483.5	1491.6	1483.5
177.5°	1495.1	1489.3	1489.3	1497.4	1488.1
180°	1492.7	1492.7	1492.7	1492.7	1492.7

(END OF REPORT)