

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: P1025980

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025980
REPORT IS A COMBINATION OF REPORTS P998890 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-F
Description: Define 4 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

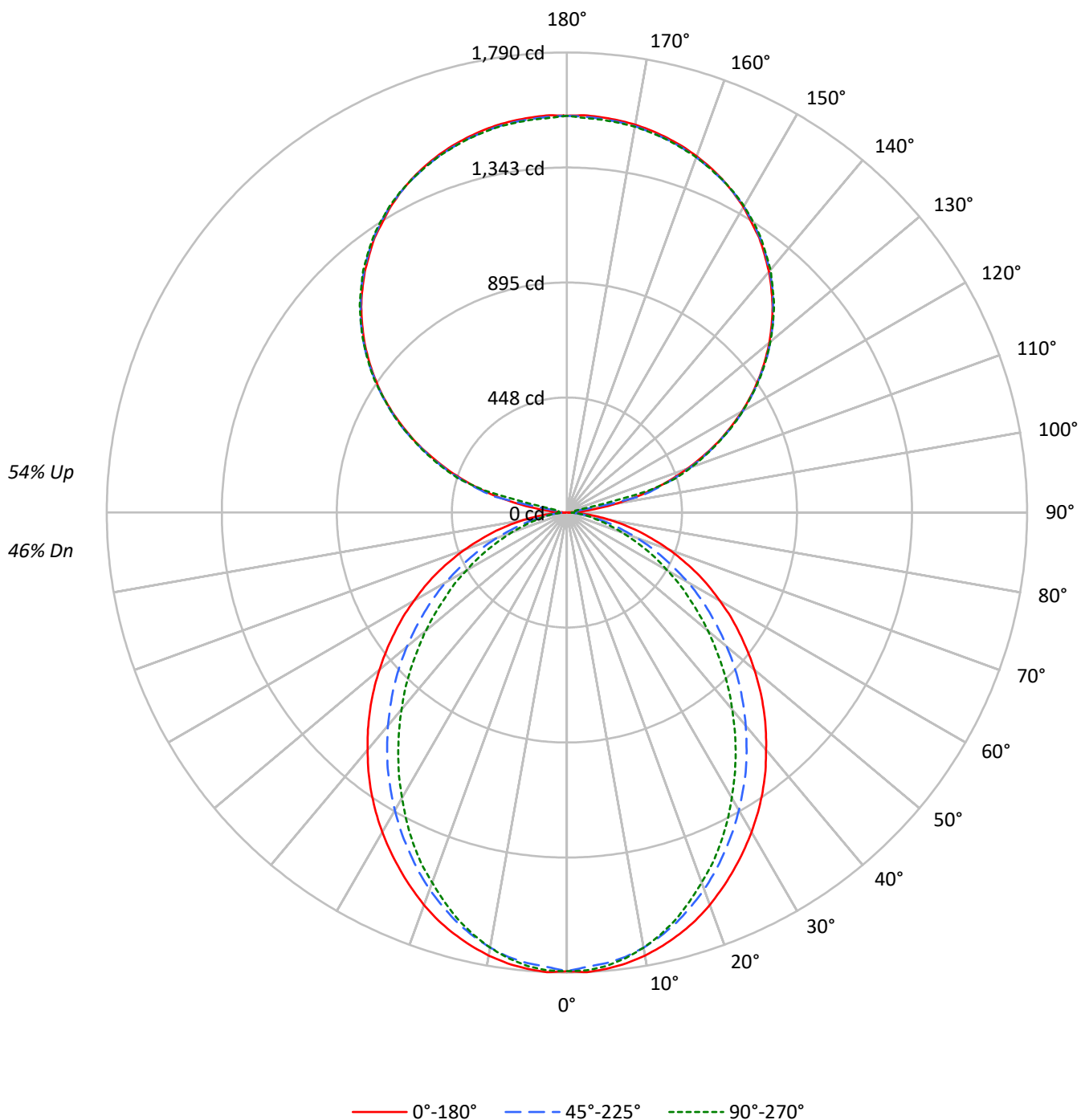
Lumens per Lamp: N/A
Luminaire Lumens: 8904.0 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	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°	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	1.9
10°-20°	467.9	5.3
20°-30°	675.6	7.6
30°-40°	765.7	8.6
40°-50°	739.3	8.3
50°-60°	614.6	6.9
60°-70°	424.2	4.8
70°-80°	214.4	2.4
80°-90°	57.6	0.6
90°-100°	51.2	0.6
100°-110°	337.5	3.8
110°-120°	644.4	7.2
120°-130°	818.1	9.2
130°-140°	875.1	9.8
140°-150°	818.3	9.2
150°-160°	659.9	7.4
160°-170°	425.6	4.8
170°-180°	146.7	1.6
0°-30°	1311.4	14.7
0°-40°	2077.1	23.3
0°-60°	3431.0	38.5
0°-90°	4127.2	46.4
90°-120°	1033.1	11.6
90°-150°	3544.6	39.8
90°-180°	4777.0	53.6
0°-180°	8904.0	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	8
95°	64	24	25	32	34	78
105°	348	354	360	371	329	364
115°	649	652	651	654	654	639
125°	912	917	914	918	919	815
135°	1132	1130	1135	1137	1140	872
145°	1305	1308	1308	1309	1312	815
155°	1431	1432	1428	1433	1429	660
165°	1509	1503	1503	1512	1502	426
175°	1544	1537	1538	1548	1534	147
180°	1544	1544	1544	1544	1544	

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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°	17.3	15.0	24.2	31.2	31.2
95°	63.5	24.2	25.4	32.3	33.5
97.5°	121.2	146.6	25.4	31.2	32.3
100°	189.4	210.1	50.8	31.2	32.3
102.5°	265.6	279.4	293.3	33.5	33.5
105°	347.5	354.5	360.2	370.6	329.1
107.5°	422.6	426.1	434.1	439.9	444.5
110°	498.8	502.3	509.2	511.5	515.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	572.7	579.6	581.9	580.8	585.4
115°	648.9	652.4	651.2	653.5	653.5
117.5°	717.0	721.6	725.1	723.9	723.9
120°	786.3	790.9	789.8	792.1	789.8
122.5°	851.0	853.3	855.6	856.7	854.4
125°	912.1	916.8	914.5	917.9	919.1
127.5°	971.0	972.2	978.0	976.8	975.6
130°	1027.6	1028.8	1032.2	1033.4	1033.4
132.5°	1079.6	1081.9	1086.5	1087.6	1086.5
135°	1131.5	1130.4	1135.0	1137.3	1139.6
137.5°	1177.7	1177.7	1183.5	1185.8	1184.6
140°	1222.7	1225.0	1227.4	1230.8	1232.0
142.5°	1263.1	1267.8	1268.9	1271.2	1271.2
145°	1304.7	1308.2	1308.2	1309.3	1311.6
147.5°	1337.0	1344.0	1342.8	1344.0	1345.1
150°	1372.8	1377.5	1376.3	1376.3	1377.5
152.5°	1402.9	1406.3	1404.0	1406.3	1405.2
155°	1430.6	1431.7	1428.3	1432.9	1429.4
157.5°	1454.8	1454.8	1450.2	1456.0	1450.2
160°	1475.6	1472.1	1471.0	1477.9	1471.0
162.5°	1494.1	1489.5	1488.3	1495.2	1487.1
165°	1509.1	1503.3	1503.3	1512.5	1502.2
167.5°	1521.8	1516.0	1514.9	1525.2	1513.7
170°	1532.2	1525.2	1526.4	1535.6	1524.1
172.5°	1539.1	1532.2	1533.3	1542.6	1529.9
175°	1543.7	1536.8	1537.9	1548.3	1534.5
177.5°	1547.2	1539.1	1541.4	1550.6	1536.8
180°	1543.7	1543.7	1543.7	1543.7	1543.7

(END OF REPORT)