

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: P1013221

Luminaire Tested: S124RDIP-B1020D1205UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1013221
REPORT IS A COMBINATION OF REPORTS P998872 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D1205UB2750-4F0-XX-W2A-F_3500K
Description: Define 4 Regressed Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

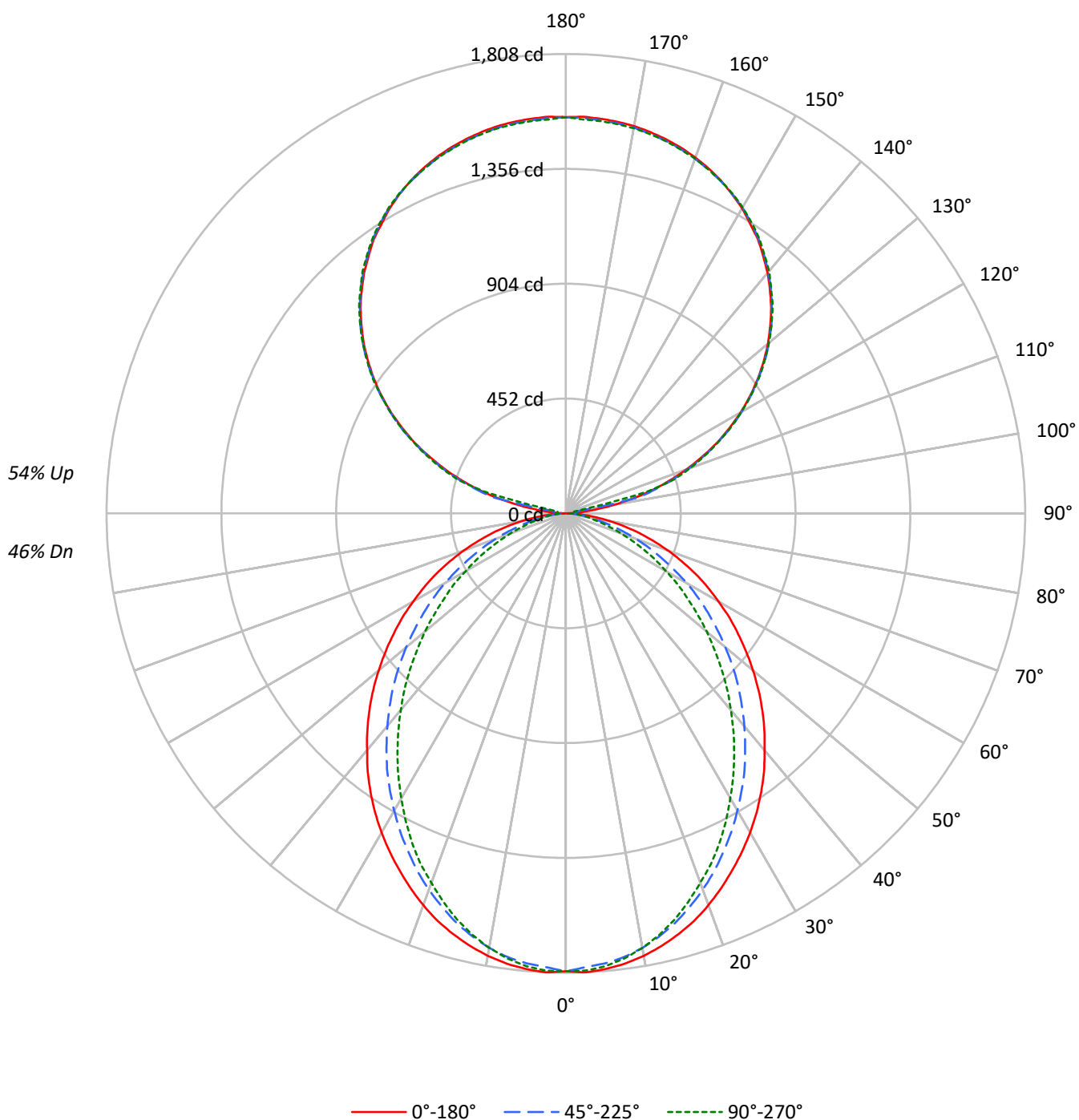
Lumens per Lamp: N/A
Luminaire Lumens: 8993.0 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	14699	14699	14699
5°	14700	14262	14264
10°	14576	13812	13648
15°	14375	13252	12922
20°	14113	12613	12093
25°	13785	11923	11284
30°	13464	11220	10375
35°	13112	10508	9487
40°	12692	9740	8574
45°	12298	8979	7671
50°	11851	8148	6753
55°	11367	7296	5807
60°	10831	6391	4872
65°	10312	5353	3970
70°	9575	4261	3035
75°	8631	3101	2122
80°	7210	1904	1525
85°	5421	1097	838

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12298 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.5	1.9
10°-20°	472.6	5.3
20°-30°	682.3	7.6
30°-40°	773.3	8.6
40°-50°	746.6	8.3
50°-60°	620.7	6.9
60°-70°	428.4	4.8
70°-80°	216.5	2.4
80°-90°	58.2	0.6
90°-100°	51.8	0.6
100°-110°	340.8	3.8
110°-120°	650.9	7.2
120°-130°	826.3	9.2
130°-140°	883.9	9.8
140°-150°	826.5	9.2
150°-160°	666.5	7.4
160°-170°	429.9	4.8
170°-180°	148.2	1.6
0°-30°	1324.4	14.7
0°-40°	2097.7	23.3
0°-60°	3465.1	38.5
0°-90°	4168.2	46.3
90°-120°	1043.5	11.6
90°-150°	3580.2	39.8
90°-180°	4825.0	53.7
0°-180°	8993.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1803	1803	1803	1803	1803	
5°	1800	1794	1778	1792	1789	171
15°	1714	1702	1667	1664	1655	483
25°	1550	1525	1468	1445	1431	714
35°	1340	1296	1227	1180	1155	838
45°	1093	1042	959	892	867	843
55°	828	773	683	611	585	741
65°	563	504	415	356	340	556
75°	300	248	184	152	144	316
85°	74	47	43	40	40	82
90°	4	16	26	33	35	8
95°	64	24	26	33	34	79
105°	351	358	364	374	332	367
115°	655	659	658	660	660	645
125°	921	926	924	927	928	823
135°	1143	1142	1146	1149	1151	881
145°	1318	1321	1321	1322	1325	823
155°	1445	1446	1443	1447	1444	666
165°	1524	1518	1518	1528	1517	431
175°	1559	1552	1553	1564	1550	148
180°	1559	1559	1559	1559	1559	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1802.6	1802.6	1802.6	1802.6	1802.6
2.5°	1808.1	1802.6	1787.4	1802.6	1801.2
5°	1799.8	1794.3	1777.7	1791.5	1788.8
7.5°	1787.4	1781.9	1761.2	1770.8	1766.7
10°	1768.1	1761.2	1736.3	1741.8	1736.3
12.5°	1743.2	1734.9	1704.6	1707.3	1699.0
15°	1714.2	1701.8	1667.3	1664.5	1654.9
17.5°	1681.1	1663.2	1623.1	1616.2	1602.4
20°	1641.1	1623.1	1576.2	1565.2	1547.2
22.5°	1596.9	1576.2	1525.1	1507.2	1493.4
25°	1550.0	1525.1	1468.5	1445.1	1431.3
27.5°	1501.7	1471.3	1412.0	1384.4	1365.0
30°	1450.6	1416.1	1351.2	1316.7	1294.6
32.5°	1396.8	1356.7	1289.1	1247.7	1227.0
35°	1340.2	1296.0	1227.0	1180.1	1155.2
37.5°	1280.8	1235.3	1159.4	1108.3	1083.5
40°	1217.3	1171.8	1093.1	1035.2	1010.3
42.5°	1156.6	1108.3	1025.5	966.1	939.9
45°	1093.1	1042.1	959.2	891.6	866.8
47.5°	1028.3	975.8	890.2	819.8	792.2
50°	962.0	908.2	819.8	750.8	724.6
52.5°	894.4	841.9	750.8	680.4	652.8
55°	828.1	772.9	683.2	611.4	585.2
57.5°	763.3	705.3	617.0	543.8	524.5
60°	692.9	637.7	549.3	477.6	455.5
62.5°	629.4	571.4	480.3	415.4	398.9
65°	563.1	503.8	415.4	356.1	339.5
67.5°	494.1	437.5	354.7	302.3	282.9
70°	429.2	371.3	292.6	247.1	233.3
72.5°	360.2	309.2	236.0	198.8	186.3
75°	299.5	248.4	183.6	151.8	143.5
77.5°	236.0	191.8	136.6	114.6	111.8
80°	175.3	135.3	93.9	89.7	88.3
82.5°	122.8	87.0	67.6	64.9	63.5
85°	74.5	46.9	42.8	40.0	40.0
87.5°	31.7	20.7	19.3	17.9	19.3
90°	3.5	16.3	25.7	32.7	35.0
92.5°	17.5	15.2	24.5	31.5	31.5
95°	64.1	24.5	25.7	32.7	33.8
97.5°	122.5	148.1	25.7	31.5	32.7
100°	191.3	212.2	51.3	31.5	32.7
102.5°	268.2	282.2	296.2	33.8	33.8
105°	351.0	358.0	363.9	374.4	332.4
107.5°	426.8	430.3	438.5	444.3	449.0
110°	503.8	507.3	514.3	516.6	520.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	578.4	585.4	587.8	586.6	591.3
115°	655.4	658.9	657.7	660.1	660.1
117.5°	724.2	728.9	732.4	731.2	731.2
120°	794.2	798.9	797.7	800.0	797.7
122.5°	859.5	861.8	864.2	865.3	863.0
125°	921.3	926.0	923.6	927.1	928.3
127.5°	980.8	981.9	987.8	986.6	985.4
130°	1037.9	1039.1	1042.6	1043.8	1043.8
132.5°	1090.4	1092.7	1097.4	1098.6	1097.4
135°	1142.9	1141.7	1146.4	1148.7	1151.0
137.5°	1189.5	1189.5	1195.4	1197.7	1196.5
140°	1235.0	1237.3	1239.7	1243.2	1244.3
142.5°	1275.8	1280.5	1281.7	1284.0	1284.0
145°	1317.8	1321.3	1321.3	1322.5	1324.8
147.5°	1350.5	1357.5	1356.3	1357.5	1358.6
150°	1386.6	1391.3	1390.1	1390.1	1391.3
152.5°	1416.9	1420.4	1418.1	1420.4	1419.3
155°	1444.9	1446.1	1442.6	1447.3	1443.8
157.5°	1469.4	1469.4	1464.8	1470.6	1464.8
160°	1490.4	1486.9	1485.7	1492.7	1485.7
162.5°	1509.1	1504.4	1503.2	1510.2	1502.1
165°	1524.2	1518.4	1518.4	1527.7	1517.2
167.5°	1537.1	1531.2	1530.1	1540.6	1528.9
170°	1547.6	1540.6	1541.7	1551.1	1539.4
172.5°	1554.6	1547.6	1548.7	1558.1	1545.2
175°	1559.2	1552.2	1553.4	1563.9	1549.9
177.5°	1562.7	1554.6	1556.9	1566.2	1552.2
180°	1559.2	1559.2	1559.2	1559.2	1559.2

(END OF REPORT)