

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: P1024865

Luminaire Tested: S124DIP-B1020D1205UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024865
REPORT IS A COMBINATION OF REPORTS P995210 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1205UB30-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

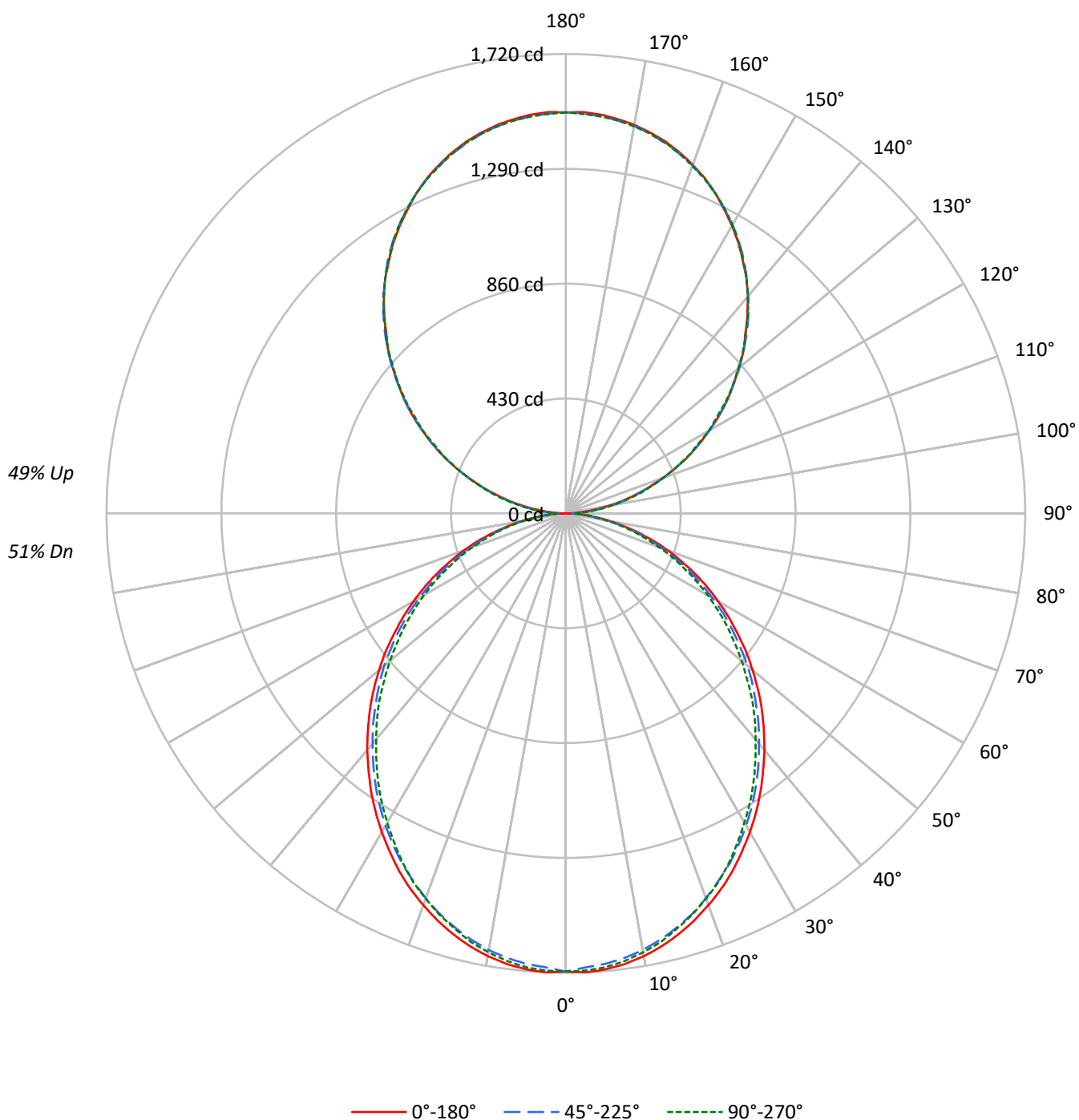
Lumens per Lamp: N/A
Luminaire Lumens: 8571.0 lumens
Efficiency: N/A
Efficacy: 104.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	84	84	84	70	70	70	57	57	57
1	98	94	90	86	90	87	83	80	74	71	69	62	60	58	51	49	48
2	89	82	76	70	82	76	70	66	65	61	57	54	51	49	45	43	41
3	81	72	65	59	75	67	60	55	57	52	48	48	44	41	40	37	35
4	75	64	56	50	69	59	52	47	51	45	41	43	39	35	35	32	30
5	68	57	49	43	63	53	46	40	45	40	35	38	34	31	32	29	26
6	63	51	43	37	58	47	40	35	41	35	31	35	30	27	29	26	23
7	58	46	38	32	54	43	36	31	37	31	27	32	27	24	26	23	20
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18
9	50	38	31	26	47	36	29	24	31	25	22	27	22	19	22	19	17
10	47	35	28	23	44	33	26	22	29	23	19	25	20	17	21	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13985	13985	13985
5°	13997	13583	13599
10°	13878	13206	13113
15°	13679	12758	12565
20°	13425	12272	11997
25°	13139	11760	11386
30°	12794	11206	10715
35°	12437	10639	10067
40°	12064	10029	9377
45°	11673	9416	8733
50°	11241	8824	8018
55°	10771	8130	7309
60°	10291	7371	6570
65°	9739	6587	5738
70°	9105	5643	4845
75°	8158	4550	3881
80°	6951	3290	2729
85°	5399	1832	1469

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11673 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.6	1.9
10°-20°	455.4	5.3
20°-30°	670.3	7.8
30°-40°	779.1	9.1
40°-50°	779.0	9.1
50°-60°	681.4	7.9
60°-70°	505.9	5.9
70°-80°	287.0	3.3
80°-90°	85.4	1.0
90°-100°	97.9	1.1
100°-110°	293.1	3.4
110°-120°	498.0	5.8
120°-130°	656.7	7.7
130°-140°	737.6	8.6
140°-150°	725.0	8.5
150°-160°	609.8	7.1
160°-170°	405.7	4.7
170°-180°	142.1	1.7
0°-30°	1287.3	15.0
0°-40°	2066.5	24.1
0°-60°	3526.9	41.1
0°-90°	4405.2	51.4
90°-120°	889.0	10.4
90°-150°	3008.3	35.1
90°-180°	4166.0	48.6
0°-180°	8571.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1715	1715	1715	1715	1715	
5°	1714	1708	1693	1708	1705	163
15°	1631	1626	1605	1613	1609	460
25°	1477	1468	1448	1450	1444	680
35°	1271	1262	1242	1233	1226	795
45°	1038	1028	1006	991	987	800
55°	785	781	761	745	737	703
65°	532	525	511	498	491	526
75°	283	276	269	264	262	300
85°	74	74	72	72	70	80
90°	4	16	26	32	35	10
95°	70	80	88	92	92	75
105°	271	272	276	280	283	287
115°	506	506	504	503	502	499
125°	737	737	736	734	732	657
135°	951	958	958	956	952	736
145°	1155	1160	1161	1160	1156	723
155°	1324	1324	1323	1327	1323	609
165°	1441	1438	1435	1442	1438	406
175°	1499	1493	1492	1500	1492	142
180°	1501	1501	1501	1501	1501	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1715.0	1715.0	1715.0	1715.0	1715.0
2.5°	1720.5	1716.4	1701.3	1715.0	1713.7
5°	1713.7	1708.2	1693.1	1708.2	1705.4
7.5°	1701.3	1695.8	1679.3	1691.7	1690.3
10°	1683.4	1677.9	1660.1	1671.1	1668.3
12.5°	1660.1	1654.6	1635.3	1647.7	1643.6
15°	1631.2	1625.7	1605.1	1613.4	1609.2
17.5°	1598.2	1591.4	1572.1	1577.6	1574.9
20°	1561.1	1554.3	1533.6	1537.8	1535.0
22.5°	1521.3	1511.7	1491.0	1499.3	1493.8
25°	1477.3	1467.7	1448.4	1449.8	1444.3
27.5°	1427.8	1418.2	1400.3	1397.6	1390.7
30°	1378.4	1367.4	1349.5	1344.0	1337.1
32.5°	1326.1	1316.5	1297.3	1290.4	1283.5
35°	1271.2	1261.5	1242.3	1232.7	1225.8
37.5°	1213.5	1205.2	1184.6	1175.0	1165.4
40°	1157.1	1146.1	1125.5	1111.8	1104.9
42.5°	1096.6	1091.1	1067.8	1051.3	1047.2
45°	1037.5	1027.9	1005.9	990.8	986.7
47.5°	975.7	968.8	948.2	931.7	920.7
50°	912.5	907.0	887.8	868.5	860.3
52.5°	850.7	843.8	823.2	806.7	795.7
55°	784.7	780.6	761.3	744.8	736.6
57.5°	722.8	718.7	699.5	683.0	674.7
60°	658.3	651.4	633.5	621.2	614.3
62.5°	595.0	589.5	570.3	559.3	552.4
65°	531.8	525.0	511.2	497.5	490.6
67.5°	467.2	461.7	448.0	434.3	432.9
70°	408.1	398.5	387.5	376.5	372.4
72.5°	344.9	335.3	327.1	318.8	314.7
75°	283.1	276.2	269.4	263.9	262.5
77.5°	222.6	219.9	213.0	211.6	207.5
80°	169.0	164.9	162.2	159.4	158.0
82.5°	116.8	115.4	115.4	114.1	112.7
85°	74.2	74.2	71.5	71.5	70.1
87.5°	35.7	34.4	33.0	33.0	33.0
90°	3.5	16.3	25.5	32.5	34.8
92.5°	30.2	45.3	51.1	54.6	55.7
95°	69.7	80.1	88.2	91.7	91.7
97.5°	111.5	120.8	130.1	134.7	134.7
100°	162.6	167.2	177.7	180.0	180.0
102.5°	216.0	217.1	226.4	229.9	231.1
105°	270.6	271.7	276.4	279.8	283.3
107.5°	327.4	328.6	329.8	334.4	333.3
110°	385.5	387.8	386.7	384.3	387.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	445.9	445.9	443.6	443.6	443.6
115°	506.3	506.3	503.9	502.8	501.6
117.5°	563.2	563.2	562.0	558.5	555.0
120°	620.1	624.7	621.2	615.4	617.7
122.5°	679.3	680.4	679.3	675.8	670.0
125°	737.3	737.3	736.2	733.9	731.5
127.5°	789.6	793.1	790.8	788.4	787.3
130°	845.3	848.8	848.8	846.5	841.8
132.5°	902.2	904.5	903.4	901.1	899.9
135°	951.0	958.0	958.0	955.6	952.2
137.5°	1005.6	1009.1	1011.4	1007.9	1009.1
140°	1060.1	1062.5	1062.5	1061.3	1060.1
142.5°	1110.1	1112.4	1111.2	1111.2	1111.2
145°	1155.4	1160.0	1161.2	1160.0	1156.5
147.5°	1201.8	1207.6	1206.4	1205.3	1204.1
150°	1243.6	1248.3	1248.3	1248.3	1247.1
152.5°	1283.1	1285.4	1286.6	1290.1	1286.6
155°	1323.7	1323.7	1322.6	1327.2	1322.6
157.5°	1358.6	1356.2	1356.2	1359.7	1356.2
160°	1388.8	1387.6	1386.4	1389.9	1384.1
162.5°	1416.6	1413.1	1412.0	1418.9	1413.1
165°	1441.0	1437.5	1435.2	1442.2	1437.5
167.5°	1460.7	1456.1	1456.1	1463.1	1456.1
170°	1477.0	1471.2	1472.4	1479.3	1471.2
172.5°	1488.6	1484.0	1484.0	1492.1	1484.0
175°	1499.1	1493.3	1492.1	1500.2	1492.1
177.5°	1503.7	1497.9	1497.9	1506.0	1496.7
180°	1501.4	1501.4	1501.4	1501.4	1501.4

(END OF REPORT)