

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: P1024819

Luminaire Tested: S124DIP-B1020D1035UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024819
REPORT IS A COMBINATION OF REPORTS P995149 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1035UB30-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

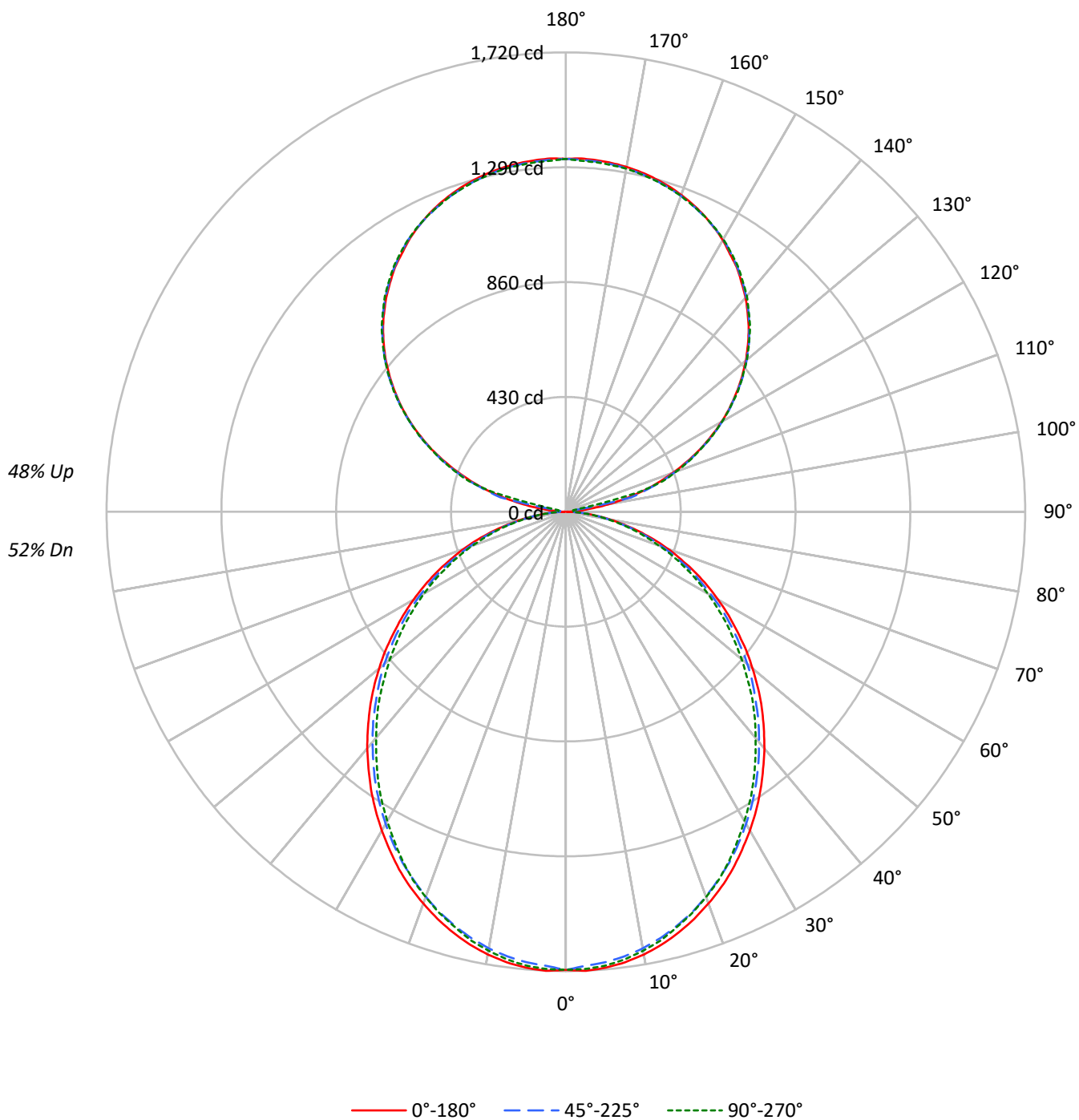
Lumens per Lamp: N/A
Luminaire Lumens: 8493.0 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 75.3
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	108	108	108	108	99	99	99	99	84	84	84	71	71	71	58	58	58
1	98	94	90	86	91	87	84	80	74	71	69	62	60	59	51	50	49
2	89	82	76	71	82	76	71	66	65	61	57	54	52	49	45	43	41
3	82	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	36	36	33	30
5	68	57	49	43	63	53	46	40	45	40	35	39	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	27	23	21
8	54	42	34	29	50	39	32	27	34	28	24	29	25	21	24	21	18
9	50	38	31	26	47	36	29	24	31	26	22	27	22	19	23	19	17
10	47	35	28	23	44	33	26	22	29	23	20	25	20	17	21	18	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	5.4
20°-30°	670.3	7.9
30°-40°	779.1	9.2
40°-50°	779.0	9.2
50°-60°	681.4	8.0
60°-70°	505.9	6.0
70°-80°	287.0	3.4
80°-90°	84.9	1.0
90°-100°	43.9	0.5
100°-110°	288.8	3.4
110°-120°	551.5	6.5
120°-130°	700.1	8.2
130°-140°	749.0	8.8
140°-150°	700.4	8.2
150°-160°	564.8	6.7
160°-170°	364.2	4.3
170°-180°	125.5	1.5
0°-30°	1287.3	15.2
0°-40°	2066.5	24.3
0°-60°	3526.9	41.5
0°-90°	4404.7	51.9
90°-120°	884.2	10.4
90°-150°	3033.7	35.7
90°-180°	4088.0	48.1
0°-180°	8493.0	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°	3	14	22	28	30	8
95°	54	21	22	28	29	67
105°	297	303	308	317	282	311
115°	555	558	557	559	559	547
125°	781	785	783	786	787	697
135°	968	967	971	973	975	746
145°	1117	1120	1120	1121	1123	698
155°	1224	1225	1222	1226	1223	565
165°	1292	1287	1287	1294	1286	365
175°	1321	1315	1316	1325	1313	126
180°	1321	1321	1321	1321	1321	

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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°	3.0	13.8	21.7	27.7	29.6
92.5°	14.8	12.8	20.8	26.7	26.7
95°	54.4	20.8	21.7	27.7	28.7
97.5°	103.8	125.5	21.7	26.7	27.7
100°	162.1	179.8	43.5	26.7	27.7
102.5°	227.3	239.1	251.0	28.7	28.7
105°	297.4	303.4	308.3	317.2	281.6
107.5°	361.7	364.6	371.6	376.5	380.5
110°	426.9	429.9	435.8	437.8	440.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	490.1	496.1	498.0	497.1	501.0
115°	555.4	558.3	557.3	559.3	559.3
117.5°	613.7	617.6	620.6	619.6	619.6
120°	673.0	676.9	675.9	677.9	675.9
122.5°	728.3	730.3	732.2	733.2	731.3
125°	780.7	784.6	782.6	785.6	786.6
127.5°	831.1	832.1	837.0	836.0	835.0
130°	879.5	880.5	883.4	884.4	884.4
132.5°	924.0	925.9	929.9	930.9	929.9
135°	968.4	967.4	971.4	973.4	975.3
137.5°	1007.9	1007.9	1012.9	1014.9	1013.9
140°	1046.5	1048.5	1050.4	1053.4	1054.4
142.5°	1081.1	1085.0	1086.0	1088.0	1088.0
145°	1116.6	1119.6	1119.6	1120.6	1122.6
147.5°	1144.3	1150.2	1149.3	1150.2	1151.2
150°	1175.0	1178.9	1177.9	1177.9	1178.9
152.5°	1200.6	1203.6	1201.6	1203.6	1202.6
155°	1224.4	1225.4	1222.4	1226.3	1223.4
157.5°	1245.1	1245.1	1241.2	1246.1	1241.2
160°	1262.9	1259.9	1258.9	1264.9	1258.9
162.5°	1278.7	1274.8	1273.8	1279.7	1272.8
165°	1291.6	1286.6	1286.6	1294.5	1285.6
167.5°	1302.4	1297.5	1296.5	1305.4	1295.5
170°	1311.3	1305.4	1306.4	1314.3	1304.4
172.5°	1317.3	1311.3	1312.3	1320.2	1309.3
175°	1321.2	1315.3	1316.3	1325.2	1313.3
177.5°	1324.2	1317.3	1319.2	1327.1	1315.3
180°	1321.2	1321.2	1321.2	1321.2	1321.2

(END OF REPORT)