

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: P1024956

Luminaire Tested: S124DIP-B1020D590UB30-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024956
REPORT IS A COMBINATION OF REPORTS P995331 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D590UB30-4F0-XX-W2A-F4
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

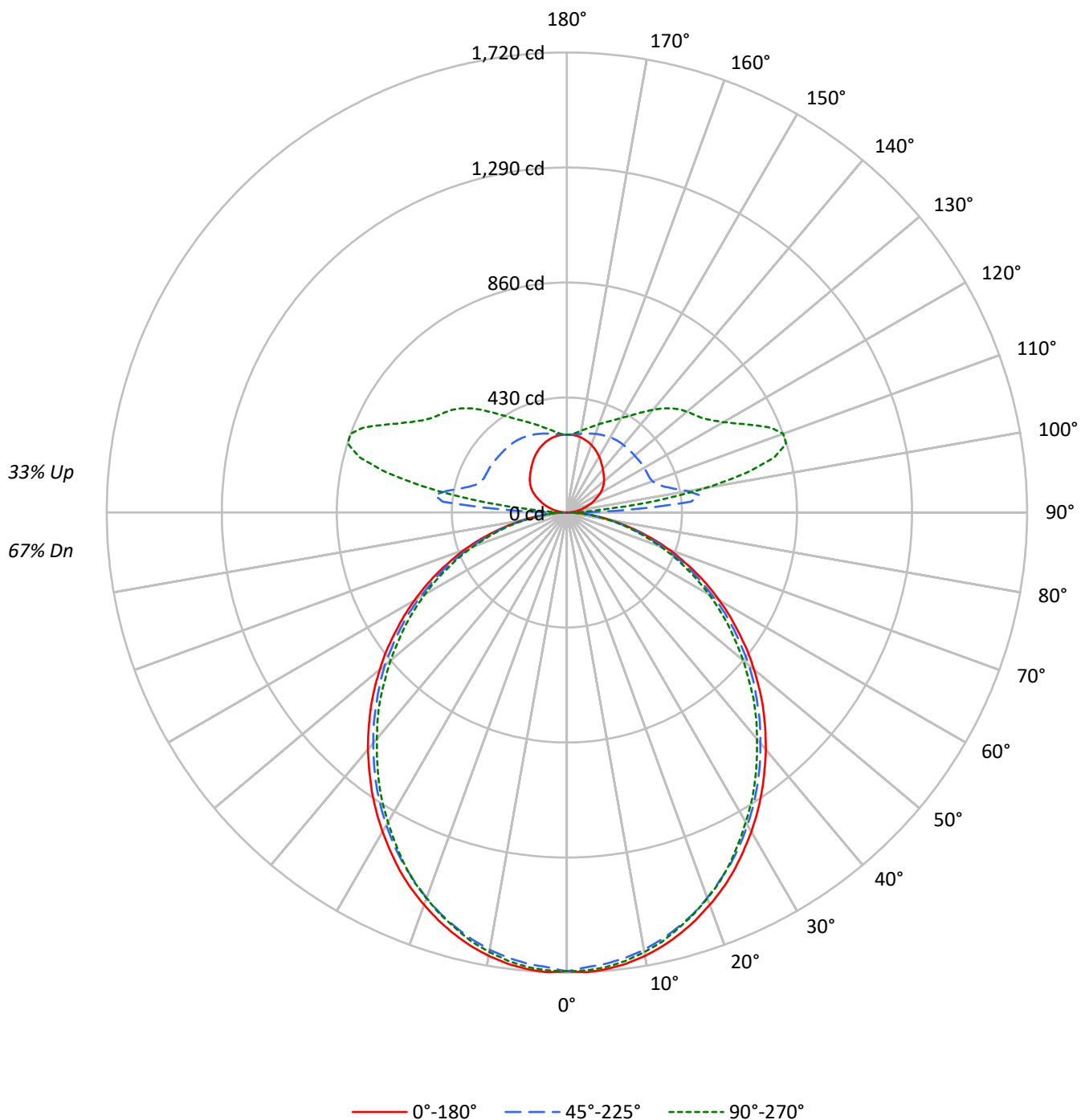
Lumens per Lamp: N/A
Luminaire Lumens: 6526.2 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 62.2
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72
1	102	97	93	90	96	92	88	85	82	79	76	72	70	68	64	62	61
2	93	85	79	73	87	80	75	70	72	67	63	64	60	57	56	54	51
3	84	75	67	61	79	71	64	58	63	58	53	56	52	48	50	46	44
4	77	66	58	52	73	63	55	50	56	50	46	50	45	42	44	41	38
5	71	59	51	44	67	56	48	43	50	44	39	45	40	36	40	36	33
6	66	53	45	39	62	50	43	37	45	39	34	41	36	32	36	32	29
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	26
8	56	44	36	30	53	42	34	29	38	32	27	34	29	25	31	26	23
9	53	40	32	27	50	38	31	26	35	29	24	31	26	23	28	24	21
10	49	37	29	24	46	35	28	24	32	26	22	29	24	21	26	22	19

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	2.5
10°-20°	455.4	7.0
20°-30°	670.3	10.3
30°-40°	779.1	11.9
40°-50°	779.0	11.9
50°-60°	681.4	10.4
60°-70°	505.9	7.8
70°-80°	287.0	4.4
80°-90°	83.3	1.3
90°-100°	216.1	3.3
100°-110°	439.5	6.7
110°-120°	391.8	6.0
120°-130°	329.1	5.0
130°-140°	274.6	4.2
140°-150°	209.7	3.2
150°-160°	147.4	2.3
160°-170°	86.7	1.3
170°-180°	28.2	0.4
0°-30°	1287.3	19.7
0°-40°	2066.5	31.7
0°-60°	3526.9	54.0
0°-90°	4403.1	67.5
90°-120°	1047.4	16.0
90°-150°	1860.8	28.5
90°-180°	2123.0	32.5
0°-180°	6526.2	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°	1	5	10	11	12	6
95°	19	59	466	231	140	21
105°	67	97	375	807	804	71
115°	118	148	334	642	772	117
125°	164	195	333	547	616	146
135°	195	232	330	485	551	151
145°	225	257	328	409	450	141
155°	256	276	319	361	377	118
165°	278	287	306	324	329	79
175°	290	291	293	297	296	28
180°	291	291	291	291	291	

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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°	0.6	4.6	10.3	11.4	12.0
92.5°	8.0	44.0	224.0	74.1	52.0
95°	18.9	59.4	465.8	230.6	139.5
97.5°	31.4	65.7	498.4	471.0	334.9
100°	43.4	74.3	459.5	651.6	524.1
102.5°	54.9	84.6	410.9	764.8	688.7
105°	66.9	96.9	374.9	807.3	804.2
107.5°	80.0	109.4	351.5	794.5	859.0
110°	93.2	122.0	340.6	748.8	860.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	105.7	134.6	335.5	692.8	826.5
115°	117.7	147.8	334.4	642.4	772.2
117.5°	130.3	160.0	333.8	603.0	719.0
120°	142.9	172.0	333.8	576.4	675.6
122.5°	154.3	183.8	333.2	559.0	641.3
125°	164.0	194.9	332.6	546.7	616.1
127.5°	173.2	205.2	331.5	535.0	600.1
130°	180.6	215.2	330.9	521.0	586.4
132.5°	188.0	223.8	330.4	504.4	571.0
135°	194.9	232.0	329.8	485.2	551.0
137.5°	201.8	239.2	329.8	464.6	527.5
140°	209.2	245.8	329.2	444.7	501.8
142.5°	217.2	251.8	329.2	426.1	474.4
145°	224.6	257.2	328.1	409.2	449.8
147.5°	233.2	262.4	326.4	395.2	427.0
150°	241.2	267.2	324.6	382.4	408.1
152.5°	248.6	271.8	321.8	371.5	390.9
155°	255.5	275.8	318.9	361.2	376.7
157.5°	262.3	279.5	316.1	351.5	363.5
160°	268.6	282.6	312.6	341.8	351.5
162.5°	274.3	285.2	309.2	332.4	340.1
165°	278.3	286.9	305.8	323.8	328.6
167.5°	282.9	288.4	302.4	316.4	319.5
170°	285.8	289.5	298.9	309.0	310.9
172.5°	288.6	290.4	295.5	302.4	302.4
175°	290.4	290.9	293.2	297.2	296.1
177.5°	291.5	290.9	291.5	293.5	291.5
180°	290.9	290.9	290.9	290.9	290.9

(END OF REPORT)