

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: P1024955

Luminaire Tested: S124DIP-B1020D590UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024955
REPORT IS A COMBINATION OF REPORTS P995330 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-F1
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

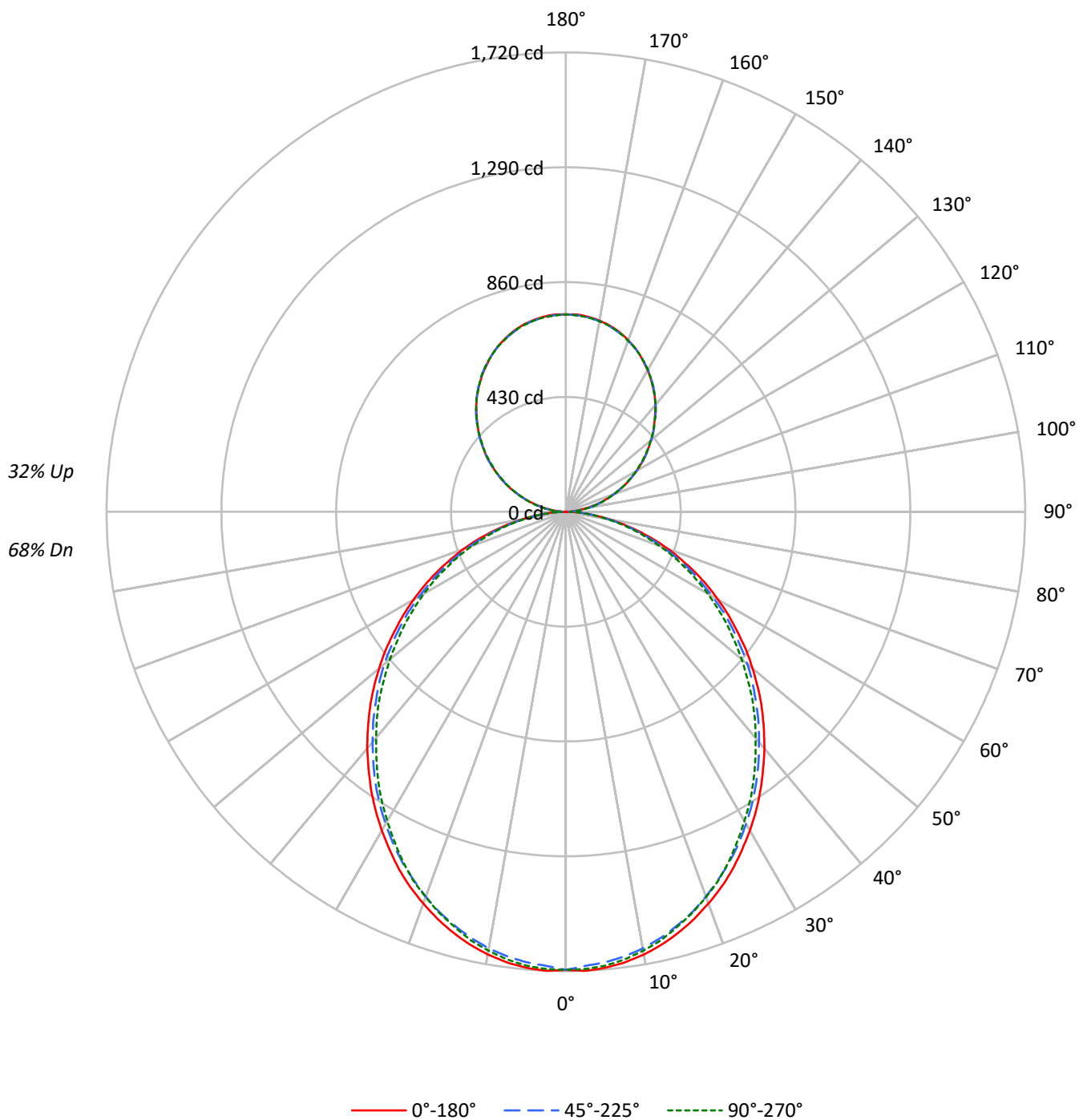
Lumens per Lamp: N/A
Luminaire Lumens: 6454.0 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

TEST NUMBER: P1024955

CATALOG NUMBER: S124DIP-B1020D590UB30-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1024955

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	111	111	111	111	105	105	105	105	93	93	93	83	83	83	73	73	73	64	63	61	57
1	102	97	93	90	96	92	88	85	82	79	77	73	71	69	64	63	61	57	54	52	48
2	93	85	79	73	87	80	75	70	72	67	64	64	61	58	57	54	52	48	47	44	41
3	85	75	67	61	80	71	64	59	63	58	54	57	52	49	50	47	44	41	38	35	30
4	77	66	58	52	73	63	55	50	56	50	46	50	46	42	45	41	38	35	33	27	24
5	71	59	51	45	67	56	49	43	51	44	40	45	40	36	40	36	33	29	26	21	19
6	66	53	45	39	62	51	43	37	46	39	35	41	36	32	37	33	29	26	21	17	15
7	61	48	40	34	57	46	38	33	41	35	31	37	32	28	34	29	26	21	17	15	13
8	57	44	36	30	53	42	34	29	38	32	27	34	29	25	31	27	23	19	17	15	13
9	53	40	32	27	50	38	31	26	35	29	25	32	26	23	29	24	21	17	15	13	11
10	49	37	29	25	47	35	28	24	32	26	22	29	24	21	26	22	19	17	15	13	11

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

TEST NUMBER: P1024955

CATALOG NUMBER: S124DIP-B1020D590UB30-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.6	2.5
10°-20°	455.4	7.1
20°-30°	670.3	10.4
30°-40°	779.1	12.1
40°-50°	779.0	12.1
50°-60°	681.4	10.6
60°-70°	505.9	7.8
70°-80°	287.0	4.4
80°-90°	83.8	1.3
90°-100°	48.2	0.7
100°-110°	144.3	2.2
110°-120°	245.1	3.8
120°-130°	323.2	5.0
130°-140°	363.1	5.6
140°-150°	356.8	5.5
150°-160°	300.1	4.7
160°-170°	199.7	3.1
170°-180°	69.9	1.1
0°-30°	1287.3	19.9
0°-40°	2066.5	32.0
0°-60°	3526.9	54.6
0°-90°	4403.6	68.2
90°-120°	437.5	6.8
90°-150°	1480.7	22.9
90°-180°	2050.0	31.8
0°-180°	6454.0	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°	2	8	13	16	17	7
95°	34	39	43	45	45	37
105°	133	134	136	138	140	141
115°	249	249	248	248	247	246
125°	363	363	362	361	360	323
135°	468	472	472	470	469	362
145°	569	571	572	571	569	356
155°	652	652	651	653	651	300
165°	709	708	706	710	708	200
175°	738	735	734	738	734	70
180°	739	739	739	739	739	

TEST NUMBER: P1024955

CATALOG NUMBER: S124DIP-B1020D590UB30-4F0-XX-W2A-F1

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°	1.7	8.0	12.6	16.0	17.1
92.5°	14.9	22.3	25.1	26.9	27.4
95°	34.3	39.4	43.4	45.2	45.2
97.5°	54.9	59.4	64.0	66.3	66.3
100°	80.0	82.3	87.4	88.6	88.6
102.5°	106.3	106.9	111.4	113.2	113.7
105°	133.2	133.7	136.0	137.7	139.5
107.5°	161.2	161.7	162.3	164.6	164.0
110°	189.7	190.9	190.3	189.2	190.9

TEST NUMBER: P1024955

CATALOG NUMBER: S124DIP-B1020D590UB30-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	219.5	219.5	218.3	218.3	218.3
115°	249.2	249.2	248.0	247.5	246.9
117.5°	277.2	277.2	276.6	274.9	273.2
120°	305.2	307.5	305.8	302.9	304.1
122.5°	334.3	334.9	334.3	332.6	329.8
125°	362.9	362.9	362.3	361.2	360.1
127.5°	388.6	390.4	389.2	388.1	387.5
130°	416.1	417.8	417.8	416.6	414.4
132.5°	444.1	445.2	444.7	443.5	442.9
135°	468.1	471.5	471.5	470.4	468.7
137.5°	494.9	496.7	497.8	496.1	496.7
140°	521.8	522.9	522.9	522.4	521.8
142.5°	546.4	547.5	547.0	547.0	547.0
145°	568.7	571.0	571.5	571.0	569.2
147.5°	591.5	594.4	593.8	593.2	592.7
150°	612.1	614.4	614.4	614.4	613.8
152.5°	631.5	632.7	633.3	635.0	633.3
155°	651.5	651.5	651.0	653.3	651.0
157.5°	668.7	667.5	667.5	669.3	667.5
160°	683.5	683.0	682.4	684.1	681.3
162.5°	697.3	695.6	695.0	698.4	695.6
165°	709.3	707.6	706.4	709.8	707.6
167.5°	719.0	716.7	716.7	720.1	716.7
170°	727.0	724.1	724.7	728.1	724.1
172.5°	732.7	730.4	730.4	734.4	730.4
175°	737.8	735.0	734.4	738.4	734.4
177.5°	740.1	737.3	737.3	741.3	736.7
180°	739.0	739.0	739.0	739.0	739.0

(END OF REPORT)