

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: P1024951

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024951
REPORT IS A COMBINATION OF REPORTS P995326 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-D
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

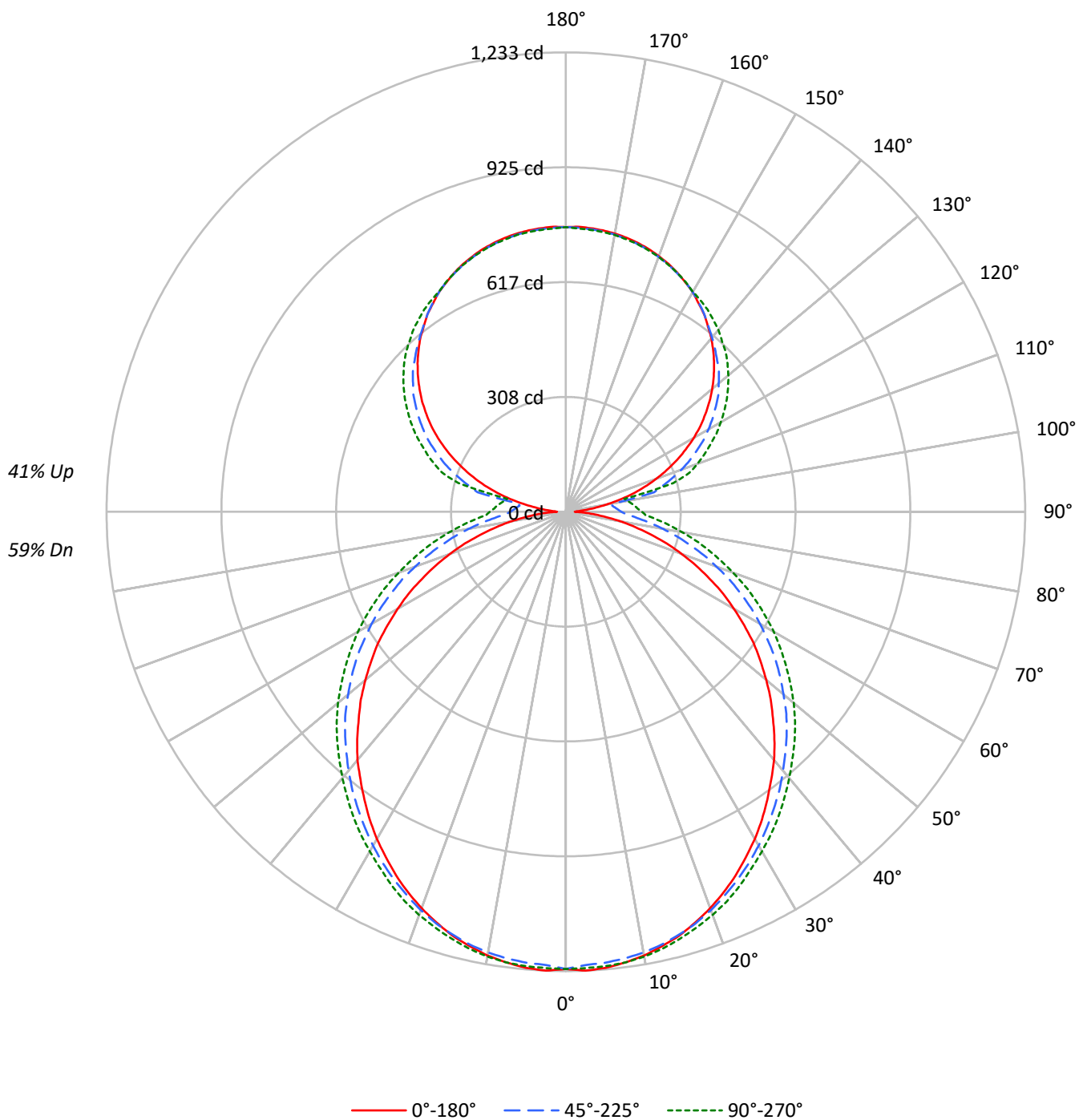
Lumens per Lamp: N/A
Luminaire Lumens: 6550.0 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1024951

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

Luminous Intensity Polar Plot



TEST NUMBER: P1024951

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

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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64
1	99	94	89	85	92	87	84	80	76	73	70	65	63	61	55	54	52
2	89	81	74	69	83	76	70	65	66	61	57	56	53	50	48	45	43
3	81	71	63	57	75	66	59	54	58	52	47	49	45	42	42	39	36
4	74	63	54	48	69	59	51	45	51	45	40	44	39	35	37	34	31
5	68	56	47	41	63	52	44	39	45	39	34	39	34	30	33	30	26
6	63	50	41	35	58	47	39	33	41	35	30	35	30	26	30	26	23
7	58	45	37	31	54	42	35	29	37	31	26	32	27	23	28	24	20
8	54	41	33	27	50	38	31	26	34	28	23	29	24	21	25	21	18
9	50	37	29	24	46	35	28	23	31	25	21	27	22	19	23	19	16
10	47	34	27	22	43	32	25	21	28	23	19	25	20	17	22	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10007	10007	10007
5°	10035	9746	9764
10°	9969	9555	9527
15°	9876	9339	9260
20°	9738	9106	9001
25°	9582	8848	8722
30°	9414	8593	8436
35°	9223	8333	8182
40°	9070	8082	7919
45°	8844	7847	7686
50°	8650	7580	7441
55°	8452	7323	7159
60°	8141	7003	6893
65°	7801	6658	6574
70°	7389	6263	6205
75°	6813	5825	5852
80°	6161	5378	5483
85°	5298	4930	5186

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 8844 cd/sqm

TEST NUMBER: P1024951

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.3	1.8
10°-20°	333.2	5.1
20°-30°	503.7	7.7
30°-40°	609.4	9.3
40°-50°	644.3	9.8
50°-60°	606.3	9.3
60°-70°	503.1	7.7
70°-80°	353.1	5.4
80°-90°	200.6	3.1
90°-100°	143.9	2.2
100°-110°	254.8	3.9
110°-120°	377.9	5.8
120°-130°	438.1	6.7
130°-140°	447.5	6.8
140°-150°	407.9	6.2
150°-160°	326.7	5.0
160°-170°	210.7	3.2
170°-180°	72.6	1.1
0°-30°	953.2	14.6
0°-40°	1562.6	23.9
0°-60°	2813.2	42.9
0°-90°	3870.1	59.1
90°-120°	776.5	11.9
90°-150°	2070.0	31.6
90°-180°	2680.0	40.9
0°-180°	6550.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1227	1227	1227	1227	1227	
5°	1229	1224	1215	1226	1224	117
15°	1178	1179	1175	1187	1186	332
25°	1077	1086	1090	1105	1106	496
35°	943	959	973	992	996	590
45°	786	812	838	862	868	608
55°	616	644	686	713	722	549
65°	426	470	517	551	562	422
75°	236	287	345	383	396	251
85°	73	131	192	234	247	76
90°	24	85	149	192	204	17
95°	49	75	132	173	186	53
105°	184	215	269	309	299	194
115°	329	344	387	418	428	325
125°	457	458	491	519	528	408
135°	563	562	574	597	607	434
145°	647	648	648	656	663	405
155°	708	709	707	709	708	327
165°	747	744	744	749	744	211
175°	764	761	761	766	760	73
180°	764	764	764	764	764	

TEST NUMBER: P1024951

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1227.2	1227.2	1227.2	1227.2	1227.2
2.5°	1232.7	1228.6	1217.6	1227.2	1225.8
5°	1228.6	1224.4	1214.8	1225.8	1224.4
7.5°	1220.3	1217.6	1209.3	1221.7	1220.3
10°	1209.3	1208.0	1201.1	1213.4	1212.1
12.5°	1194.2	1194.2	1190.1	1201.1	1201.1
15°	1177.7	1179.1	1175.0	1187.3	1186.0
17.5°	1155.7	1159.9	1158.5	1170.8	1169.5
20°	1132.4	1136.5	1137.9	1151.6	1151.6
22.5°	1106.3	1111.8	1114.5	1128.2	1131.0
25°	1077.4	1085.6	1089.8	1104.9	1106.3
27.5°	1045.8	1058.2	1063.7	1077.4	1078.8
30°	1014.2	1025.2	1034.8	1049.9	1052.7
32.5°	979.8	993.6	1004.6	1022.4	1025.2
35°	942.7	959.2	973.0	992.2	996.3
37.5°	905.6	924.9	941.4	960.6	964.7
40°	869.9	887.8	907.0	927.6	933.1
42.5°	828.7	849.3	872.6	896.0	900.1
45°	786.1	812.2	838.3	861.6	868.5
47.5°	746.2	772.3	802.6	825.9	834.2
50°	702.2	732.5	762.7	790.2	798.4
52.5°	658.3	688.5	724.2	751.7	760.0
55°	615.7	644.5	685.7	713.2	721.5
57.5°	567.6	603.3	643.1	676.1	683.0
60°	520.8	556.6	601.9	633.5	644.5
62.5°	475.5	515.3	560.7	592.3	603.3
65°	426.0	470.0	516.7	551.1	562.1
67.5°	379.3	426.0	475.5	509.8	520.8
70°	331.2	377.9	430.1	467.2	476.9
72.5°	284.5	332.6	388.9	424.6	435.6
75°	236.4	287.2	344.9	383.4	395.8
77.5°	191.0	244.6	305.1	343.6	357.3
80°	149.8	204.8	265.2	306.5	317.4
82.5°	108.6	166.3	226.7	269.4	281.7
85°	72.8	130.6	192.4	233.6	247.4
87.5°	45.3	101.7	162.2	202.0	214.4
90°	23.7	85.0	148.6	191.9	204.0
92.5°	29.2	76.1	139.8	181.7	192.7
95°	49.3	75.2	132.2	172.7	185.6
97.5°	76.5	128.9	125.3	163.8	176.8
100°	108.8	154.8	129.5	156.9	167.2
102.5°	146.5	183.6	242.8	149.9	160.9
105°	184.4	215.4	269.0	308.6	298.9
107.5°	221.6	246.6	298.7	335.9	347.8
110°	257.9	278.8	330.3	363.1	375.8

TEST NUMBER: P1024951

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	293.1	313.0	359.5	389.2	402.5
115°	329.4	343.5	386.9	418.3	427.9
117.5°	363.1	373.7	416.6	444.9	455.9
120°	396.1	402.5	441.7	470.4	480.2
122.5°	428.1	429.2	467.5	495.6	504.0
125°	457.0	457.9	491.1	519.0	527.7
127.5°	486.1	485.3	515.7	539.8	548.9
130°	512.7	511.9	535.6	561.0	569.2
132.5°	538.5	538.2	557.0	581.0	588.6
135°	562.8	562.2	574.2	597.3	606.7
137.5°	585.6	584.3	592.7	614.4	620.8
140°	607.9	607.8	610.2	629.8	637.3
142.5°	626.6	628.9	628.1	644.3	649.8
145°	647.2	647.5	647.5	656.3	662.9
147.5°	663.2	665.2	664.7	666.6	672.7
150°	680.9	681.8	681.2	681.2	681.8
152.5°	694.4	696.1	695.0	696.1	695.5
155°	708.1	708.7	707.0	709.2	707.5
157.5°	720.1	720.1	717.8	720.7	717.8
160°	730.4	728.7	728.1	731.5	728.1
162.5°	739.5	737.2	736.7	740.1	736.1
165°	747.0	744.1	744.1	748.7	743.5
167.5°	753.3	750.4	749.8	755.0	749.2
170°	758.4	755.0	755.5	760.1	754.4
172.5°	761.8	758.4	759.0	763.5	757.3
175°	764.1	760.7	761.3	766.4	759.5
177.5°	765.8	761.8	763.0	767.5	760.7
180°	764.1	764.1	764.1	764.1	764.1

(END OF REPORT)