

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: P1025845

Luminaire Tested: S124DIP-B795D590UB27-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025845
REPORT IS A COMBINATION OF REPORTS P996505 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B795D590UB27-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

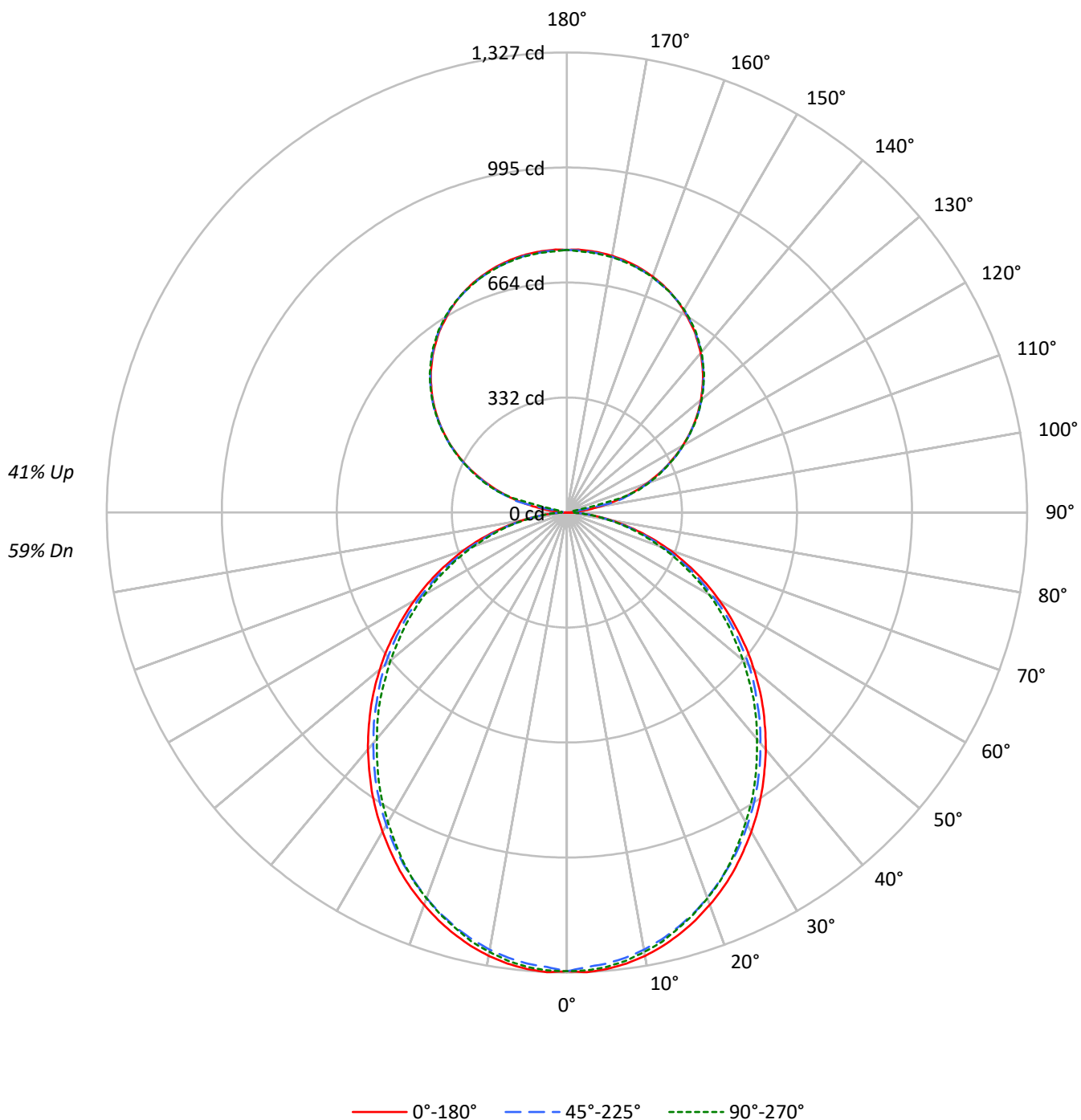
Lumens per Lamp: N/A
Luminaire Lumens: 5742.0 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 51.3
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

TEST NUMBER: P1025845

CATALOG NUMBER: S124DIP-B795D590UB27-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1025845

CATALOG NUMBER: S124DIP-B795D590UB27-4F0-XX-W2A-F

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	65	65	65
1	100	95	91	88	93	89	86	83	78	75	73	67	65	63	57	56	54
2	91	83	77	72	85	78	72	68	68	64	60	59	56	53	50	48	46
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	44	42	39
4	76	65	57	51	71	61	54	48	53	48	43	46	42	38	40	36	34
5	70	58	50	43	65	54	47	41	48	42	37	42	37	33	36	32	29
6	64	52	44	38	60	49	41	36	43	37	33	38	33	29	33	29	26
7	59	47	39	33	55	44	37	32	39	33	29	34	29	26	30	26	23
8	55	43	35	29	51	40	33	28	36	30	26	31	27	23	27	23	21
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	19
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	23	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10789	10789	10789
5°	10798	10479	10492
10°	10706	10188	10117
15°	10553	9842	9694
20°	10357	9468	9255
25°	10136	9072	8784
30°	9870	8645	8267
35°	9595	8208	7766
40°	9307	7737	7234
45°	9005	7265	6737
50°	8673	6807	6186
55°	8310	6272	5639
60°	7938	5686	5069
65°	7514	5082	4427
70°	7025	4354	3738
75°	6294	3509	2994
80°	5363	2537	2106
85°	4162	1412	1134

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9005 cd/sqm

TEST NUMBER: P1025845

CATALOG NUMBER: S124DIP-B795D590UB27-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.7	2.2
10°-20°	351.3	6.1
20°-30°	517.1	9.0
30°-40°	601.1	10.5
40°-50°	601.0	10.5
50°-60°	525.7	9.2
60°-70°	390.3	6.8
70°-80°	221.4	3.9
80°-90°	65.0	1.1
90°-100°	25.2	0.4
100°-110°	165.6	2.9
110°-120°	316.3	5.5
120°-130°	401.5	7.0
130°-140°	429.5	7.5
140°-150°	401.6	7.0
150°-160°	323.9	5.6
160°-170°	208.9	3.6
170°-180°	72.0	1.3
0°-30°	993.1	17.3
0°-40°	1594.2	27.8
0°-60°	2720.9	47.4
0°-90°	3397.6	59.2
90°-120°	507.0	8.8
90°-150°	1739.7	30.3
90°-180°	2344.0	40.8
0°-180°	5742.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1323	1323	1323	1323	1323	
5°	1322	1318	1306	1318	1316	125
15°	1258	1254	1238	1245	1242	355
25°	1140	1132	1117	1118	1114	524
35°	981	973	958	951	946	613
45°	800	793	776	764	761	617
55°	605	602	587	575	568	542
65°	410	405	394	384	378	406
75°	218	213	208	204	202	232
85°	57	57	55	55	54	62
90°	2	8	12	16	17	5
95°	31	12	12	16	16	38
105°	171	174	177	182	162	179
115°	318	320	320	321	321	313
125°	448	450	449	450	451	400
135°	555	555	557	558	559	428
145°	640	642	642	643	644	400
155°	702	703	701	703	702	324
165°	741	738	738	742	737	209
175°	758	754	755	760	753	72
180°	758	758	758	758	758	

TEST NUMBER: P1025845

CATALOG NUMBER: S124DIP-B795D590UB27-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1323.1	1323.1	1323.1	1323.1	1323.1
2.5°	1327.3	1324.2	1312.5	1323.1	1322.0
5°	1322.0	1317.8	1306.1	1317.8	1315.7
7.5°	1312.5	1308.3	1295.5	1305.1	1304.0
10°	1298.7	1294.5	1280.7	1289.2	1287.1
12.5°	1280.7	1276.5	1261.6	1271.2	1268.0
15°	1258.4	1254.2	1238.3	1244.6	1241.5
17.5°	1233.0	1227.7	1212.8	1217.1	1215.0
20°	1204.4	1199.1	1183.2	1186.3	1184.2
22.5°	1173.6	1166.2	1150.3	1156.7	1152.4
25°	1139.7	1132.3	1117.4	1118.5	1114.2
27.5°	1101.5	1094.1	1080.3	1078.2	1072.9
30°	1063.4	1054.9	1041.1	1036.9	1031.6
32.5°	1023.1	1015.7	1000.8	995.5	990.2
35°	980.7	973.2	958.4	951.0	945.7
37.5°	936.1	929.8	913.9	906.5	899.0
40°	892.7	884.2	868.3	857.7	852.4
42.5°	846.0	841.8	823.8	811.0	807.9
45°	800.4	793.0	776.1	764.4	761.2
47.5°	752.7	747.4	731.5	718.8	710.3
50°	704.0	699.7	684.9	670.0	663.7
52.5°	656.3	650.9	635.0	622.3	613.8
55°	605.4	602.2	587.3	574.6	568.3
57.5°	557.7	554.5	539.6	526.9	520.5
60°	507.8	502.5	488.7	479.2	473.9
62.5°	459.1	454.8	440.0	431.5	426.2
65°	410.3	405.0	394.4	383.8	378.5
67.5°	360.5	356.2	345.6	335.0	334.0
70°	314.9	307.5	299.0	290.5	287.3
72.5°	266.1	258.7	252.3	246.0	242.8
75°	218.4	213.1	207.8	203.6	202.5
77.5°	171.7	169.6	164.3	163.3	160.1
80°	130.4	127.2	125.1	123.0	121.9
82.5°	90.1	89.1	89.1	88.0	86.9
85°	57.2	57.2	55.1	55.1	54.1
87.5°	27.6	26.5	25.4	25.4	25.4
90°	1.7	7.9	12.5	15.9	17.0
92.5°	8.5	7.4	11.9	15.3	15.3
95°	31.2	11.9	12.5	15.9	16.4
97.5°	59.5	72.0	12.5	15.3	15.9
100°	92.9	103.1	24.9	15.3	15.9
102.5°	130.3	137.1	143.9	16.4	16.4
105°	170.6	174.0	176.8	181.9	161.5
107.5°	207.4	209.1	213.1	215.9	218.2
110°	244.8	246.5	249.9	251.0	252.7



TEST NUMBER: P1025845

CATALOG NUMBER: S124DIP-B795D590UB27-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	281.1	284.5	285.6	285.0	287.3
115°	318.5	320.2	319.6	320.7	320.7
117.5°	351.9	354.2	355.9	355.3	355.3
120°	385.9	388.2	387.6	388.7	387.6
122.5°	417.6	418.8	419.9	420.5	419.3
125°	447.7	449.9	448.8	450.5	451.1
127.5°	476.6	477.1	480.0	479.4	478.8
130°	504.3	504.9	506.6	507.2	507.2
132.5°	529.8	531.0	533.2	533.8	533.2
135°	555.3	554.8	557.0	558.2	559.3
137.5°	578.0	578.0	580.8	582.0	581.4
140°	600.1	601.2	602.4	604.1	604.6
142.5°	619.9	622.2	622.8	623.9	623.9
145°	640.3	642.0	642.0	642.6	643.7
147.5°	656.2	659.6	659.0	659.6	660.2
150°	673.8	676.0	675.5	675.5	676.0
152.5°	688.5	690.2	689.1	690.2	689.6
155°	702.1	702.7	701.0	703.2	701.5
157.5°	714.0	714.0	711.7	714.6	711.7
160°	724.2	722.5	721.9	725.3	721.9
162.5°	733.3	731.0	730.4	733.8	729.9
165°	740.6	737.8	737.8	742.3	737.2
167.5°	746.9	744.0	743.5	748.6	742.9
170°	752.0	748.6	749.1	753.7	748.0
172.5°	755.4	752.0	752.5	757.1	750.8
175°	757.6	754.2	754.8	759.9	753.1
177.5°	759.3	755.4	756.5	761.0	754.2
180°	757.6	757.6	757.6	757.6	757.6

(END OF REPORT)