

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: P1025883

Luminaire Tested: S124DIP-B795D590UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025883
REPORT IS A COMBINATION OF REPORTS P996558 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B795D590UB50-4F0-XX-W2A-F4
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

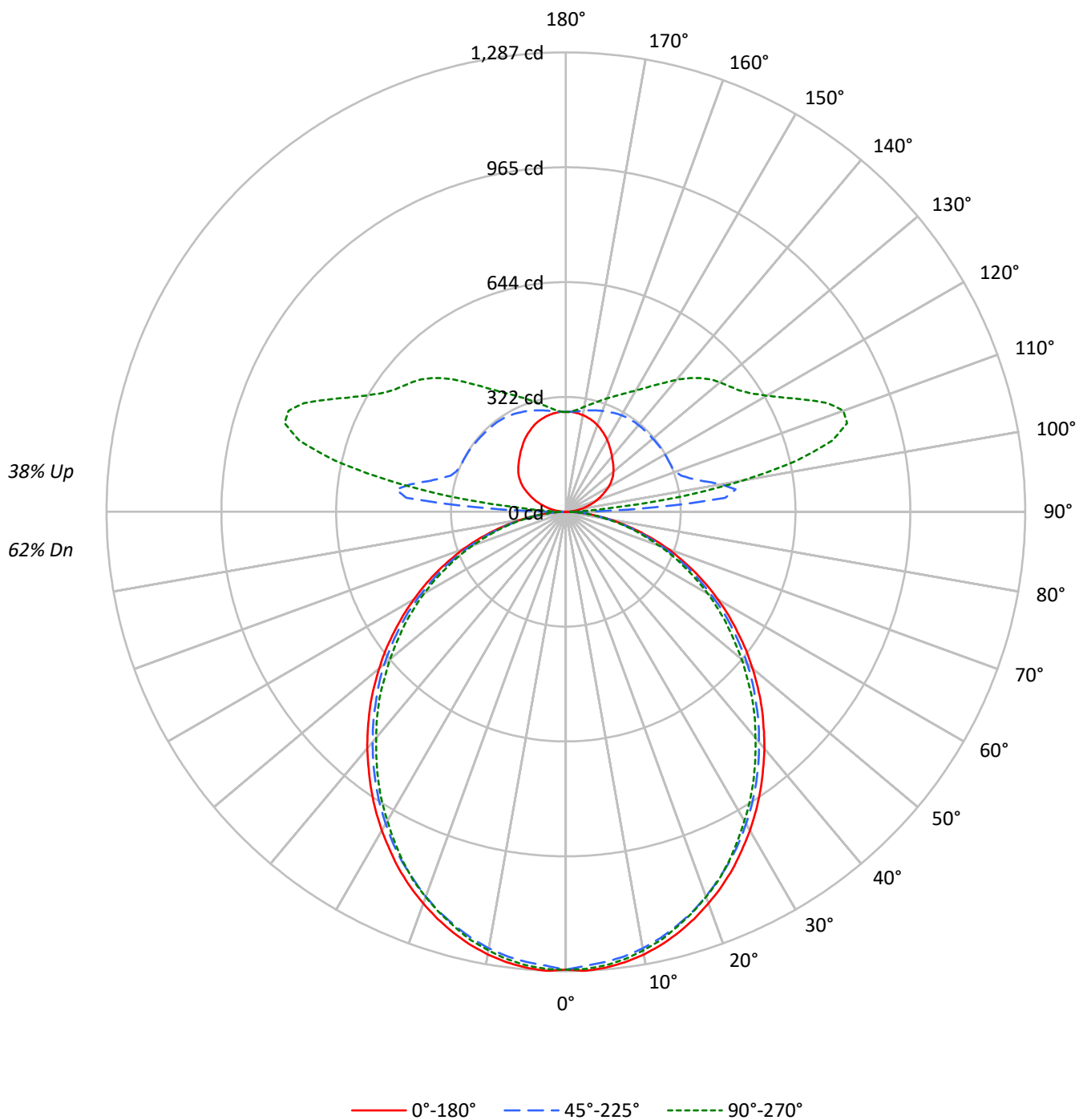
Lumens per Lamp: N/A
Luminaire Lumens: 5336.1 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 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: P1025883

CATALOG NUMBER: S124DIP-B795D590UB50-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P1025883

CATALOG NUMBER: S124DIP-B795D590UB50-4F0-XX-W2A-F4

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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	100	96	92	88	94	90	87	83	79	76	74	69	67	65	59	58	56
2	91	84	78	72	85	79	73	68	69	65	61	60	57	54	52	50	48
3	83	74	66	60	78	69	63	57	61	56	51	53	49	46	46	43	40
4	76	65	57	51	71	61	54	49	54	48	44	47	43	39	41	38	35
5	70	58	50	44	65	55	47	42	49	43	38	43	38	34	37	33	30
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27
7	60	47	39	33	56	45	37	32	40	34	29	35	30	27	31	27	24
8	56	43	35	30	52	41	33	28	36	30	26	32	27	24	28	24	21
9	52	39	32	27	49	37	30	25	33	28	23	30	25	21	26	22	19
10	48	36	29	24	45	34	28	23	31	25	21	27	23	19	24	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10462	10462	10462
5°	10470	10161	10174
10°	10382	9879	9810
15°	10233	9543	9399
20°	10043	9181	8975
25°	9829	8797	8518
30°	9571	8383	8016
35°	9303	7958	7531
40°	9025	7503	7014
45°	8733	7044	6532
50°	8409	6600	5998
55°	8058	6082	5467
60°	7697	5514	4915
65°	7285	4927	4292
70°	6811	4222	3625
75°	6104	3403	2904
80°	5199	2460	2042
85°	4039	1371	1098

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8733 cd/sqm

TEST NUMBER: P1025883

CATALOG NUMBER: S124DIP-B795D590UB50-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.9	2.3
10°-20°	340.7	6.4
20°-30°	501.4	9.4
30°-40°	582.8	10.9
40°-50°	582.8	10.9
50°-60°	509.7	9.6
60°-70°	378.4	7.1
70°-80°	214.7	4.0
80°-90°	62.6	1.2
90°-100°	207.8	3.9
100°-110°	422.7	7.9
110°-120°	376.8	7.1
120°-130°	316.5	5.9
130°-140°	264.1	4.9
140°-150°	201.7	3.8
150°-160°	141.8	2.7
160°-170°	83.4	1.6
170°-180°	27.1	0.5
0°-30°	963.0	18.0
0°-40°	1545.9	29.0
0°-60°	2638.4	49.4
0°-90°	3294.1	61.7
90°-120°	1007.4	18.9
90°-150°	1789.7	33.5
90°-180°	2042.0	38.3
0°-180°	5336.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1283	1283	1283	1283	1283	
5°	1282	1278	1266	1278	1276	122
15°	1220	1216	1201	1207	1204	344
25°	1105	1098	1084	1085	1080	509
35°	951	944	929	922	917	595
45°	776	769	752	741	738	598
55°	587	584	570	557	551	526
65°	398	393	382	372	367	394
75°	212	207	202	197	196	225
85°	56	56	54	54	52	60
90°	0	4	10	11	12	5
95°	18	57	448	222	134	20
105°	64	93	361	776	774	69
115°	113	142	322	618	743	112
125°	158	187	320	526	593	141
135°	188	223	317	467	530	145
145°	216	247	316	394	433	136
155°	246	265	307	347	362	113
165°	268	276	294	311	316	76
175°	279	280	282	286	285	27
180°	280	280	280	280	280	

TEST NUMBER: P1025883

CATALOG NUMBER: S124DIP-B795D590UB50-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1283.0	1283.0	1283.0	1283.0	1283.0
2.5°	1287.1	1284.0	1272.7	1283.0	1281.9
5°	1281.9	1277.8	1266.5	1277.8	1275.8
7.5°	1272.7	1268.6	1256.2	1265.5	1264.5
10°	1259.3	1255.2	1241.9	1250.1	1248.0
12.5°	1241.9	1237.7	1223.3	1232.6	1229.5
15°	1220.3	1216.2	1200.7	1206.9	1203.8
17.5°	1195.6	1190.5	1176.1	1180.2	1178.1
20°	1167.8	1162.7	1147.3	1150.4	1148.3
22.5°	1138.0	1130.8	1115.4	1121.6	1117.5
25°	1105.1	1097.9	1083.5	1084.6	1080.5
27.5°	1068.1	1060.9	1047.6	1045.5	1040.4
30°	1031.1	1022.9	1009.5	1005.4	1000.3
32.5°	992.0	984.8	970.5	965.3	960.2
35°	950.9	943.7	929.3	922.1	917.0
37.5°	907.7	901.6	886.2	879.0	871.8
40°	865.6	857.4	842.0	831.7	826.5
42.5°	820.4	816.3	798.8	786.4	783.4
45°	776.2	769.0	752.5	741.2	738.1
47.5°	729.9	724.8	709.3	697.0	688.8
50°	682.6	678.5	664.1	649.7	643.5
52.5°	636.3	631.2	615.8	603.4	595.2
55°	587.0	583.9	569.5	557.2	551.0
57.5°	540.7	537.7	523.3	510.9	504.8
60°	492.4	487.3	473.9	464.7	459.5
62.5°	445.1	441.0	426.6	418.4	413.3
65°	397.8	392.7	382.4	372.1	367.0
67.5°	349.5	345.4	335.1	324.9	323.8
70°	305.3	298.1	289.9	281.7	278.6
72.5°	258.0	250.8	244.7	238.5	235.4
75°	211.8	206.6	201.5	197.4	196.4
77.5°	166.5	164.5	159.3	158.3	155.2
80°	126.4	123.4	121.3	119.3	118.2
82.5°	87.4	86.4	86.4	85.3	84.3
85°	55.5	55.5	53.5	53.5	52.4
87.5°	26.7	25.7	24.7	24.7	24.7
90°	0.5	4.4	9.9	11.0	11.5
92.5°	7.7	42.4	215.5	71.2	50.0
95°	18.1	57.2	448.0	221.8	134.1
97.5°	30.2	63.2	479.4	453.0	322.1
100°	41.8	71.5	442.0	626.6	504.1
102.5°	52.8	81.4	395.2	735.5	662.4
105°	64.3	93.2	360.6	776.4	773.5
107.5°	77.0	105.2	338.1	764.1	826.2
110°	89.6	117.4	327.6	720.2	827.3

TEST NUMBER: P1025883

CATALOG NUMBER: S124DIP-B795D590UB50-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	101.7	129.4	322.7	666.2	794.9
115°	113.2	142.1	321.6	617.9	742.7
117.5°	125.3	153.9	321.0	580.0	691.5
120°	137.4	165.5	321.0	554.4	649.8
122.5°	148.4	176.8	320.5	537.6	616.8
125°	157.8	187.4	319.9	525.8	592.6
127.5°	166.6	197.4	318.8	514.5	577.2
130°	173.7	207.0	318.3	501.0	564.0
132.5°	180.9	215.2	317.7	485.2	549.2
135°	187.5	223.2	317.2	466.8	529.9
137.5°	194.1	230.0	317.2	447.0	507.4
140°	201.2	236.4	316.6	427.6	482.7
142.5°	208.9	242.2	316.6	409.8	456.3
145°	216.0	247.4	315.5	393.6	432.6
147.5°	224.3	252.3	313.9	380.2	410.6
150°	232.0	257.0	312.2	367.8	392.5
152.5°	239.1	261.4	309.5	357.4	376.0
155°	245.7	265.2	306.7	347.4	362.3
157.5°	252.3	268.8	304.0	338.0	349.6
160°	258.4	271.8	300.7	328.7	338.1
162.5°	263.9	274.3	297.4	319.6	327.1
165°	267.7	276.0	294.1	311.4	316.1
167.5°	272.1	277.4	290.8	304.2	307.3
170°	274.9	278.5	287.5	297.1	299.0
172.5°	277.6	279.2	284.2	290.8	290.8
175°	279.3	279.8	282.0	285.9	284.8
177.5°	280.4	279.8	280.4	282.3	280.4
180°	279.8	279.8	279.8	279.8	279.8

(END OF REPORT)