

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: P1026623

Luminaire Tested: S124RDIP-B795D590UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026623
REPORT IS A COMBINATION OF REPORTS P999743 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B795D590UB27-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

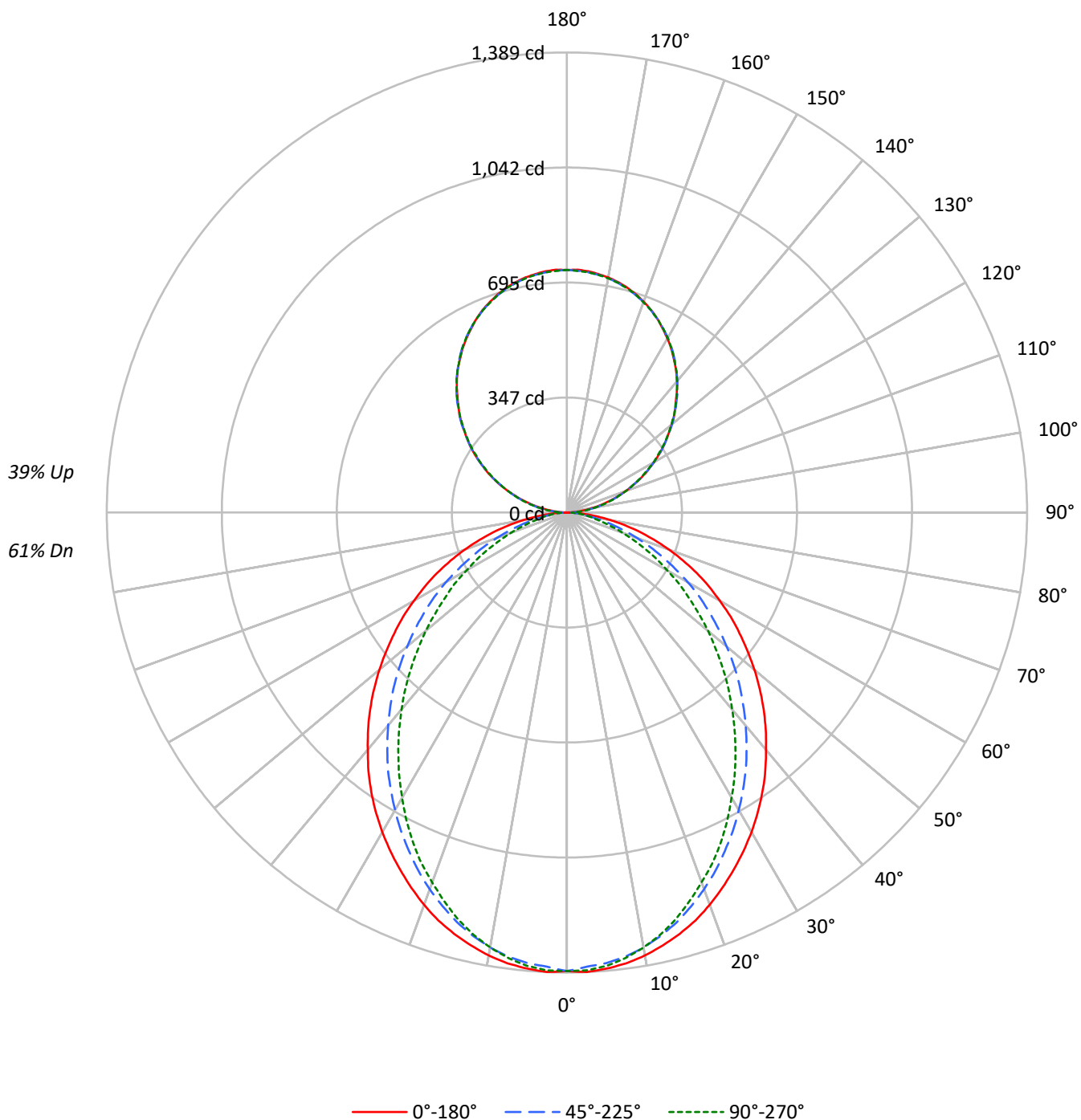
Lumens per Lamp: N/A
Luminaire Lumens: 5233.0 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

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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	110	110	110	110	103	103	103	103	90	90	90	77	77	77	66	66	66
1	101	96	93	89	94	90	87	84	79	77	74	69	67	65	59	58	57
2	92	85	78	73	86	79	74	69	70	66	62	61	58	55	53	50	48
3	84	75	67	61	78	70	64	58	62	57	53	54	50	47	47	44	41
4	77	66	58	52	72	62	55	50	55	50	45	48	44	40	42	39	36
5	71	59	51	45	66	56	49	43	49	44	39	44	39	35	38	34	32
6	65	53	45	39	61	50	43	38	45	39	34	39	35	31	35	31	28
7	61	48	40	35	57	46	38	33	41	35	30	36	31	28	32	28	25
8	56	44	36	31	53	42	35	30	37	31	27	33	28	25	29	25	22
9	53	40	33	28	49	38	31	27	34	28	24	30	26	22	27	23	20
10	49	37	30	25	46	35	29	24	32	26	22	28	24	20	25	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11290	11290	11290
5°	11291	10954	10956
10°	11195	10609	10482
15°	11041	10178	9925
20°	10840	9688	9288
25°	10588	9158	8666
30°	10342	8618	7969
35°	10071	8071	7287
40°	9749	7481	6586
45°	9446	6897	5892
50°	9103	6258	5188
55°	8732	5603	4460
60°	8319	4909	3741
65°	7921	4112	3050
70°	7356	3272	2331
75°	6628	2381	1629
80°	5536	1462	1171
85°	4162	843	643

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9446 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	2.5
10°-20°	363.0	6.9
20°-30°	524.1	10.0
30°-40°	593.9	11.3
40°-50°	573.5	11.0
50°-60°	476.8	9.1
60°-70°	329.1	6.3
70°-80°	166.3	3.2
80°-90°	43.8	0.8
90°-100°	47.7	0.9
100°-110°	143.0	2.7
110°-120°	242.9	4.6
120°-130°	320.4	6.1
130°-140°	359.9	6.9
140°-150°	353.7	6.8
150°-160°	297.5	5.7
160°-170°	197.9	3.8
170°-180°	69.3	1.3
0°-30°	1017.2	19.4
0°-40°	1611.2	30.8
0°-60°	2661.4	50.9
0°-90°	3200.6	61.2
90°-120°	433.7	8.3
90°-150°	1467.7	28.0
90°-180°	2032.0	38.8
0°-180°	5233.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1384	1384	1384	1384	1384	
5°	1382	1378	1365	1376	1374	131
15°	1317	1307	1281	1278	1271	371
25°	1190	1171	1128	1110	1099	549
35°	1029	995	942	906	887	643
45°	840	800	737	685	666	647
55°	636	594	525	470	450	569
65°	432	387	319	274	261	427
75°	230	191	141	117	110	243
85°	57	36	33	31	31	63
90°	2	8	12	16	17	6
95°	34	39	43	45	45	37
105°	132	133	135	136	138	140
115°	247	247	246	245	245	244
125°	360	360	359	358	357	321
135°	464	467	467	466	464	359
145°	564	566	566	566	564	353
155°	646	646	645	648	645	297
165°	703	701	700	704	701	198
175°	731	728	728	732	728	69
180°	732	732	732	732	732	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1384.5	1384.5	1384.5	1384.5	1384.5
2.5°	1388.7	1384.5	1372.8	1384.5	1383.4
5°	1382.4	1378.1	1365.4	1376.0	1373.9
7.5°	1372.8	1368.6	1352.7	1360.1	1356.9
10°	1358.0	1352.7	1333.6	1337.8	1333.6
12.5°	1338.9	1332.5	1309.2	1311.3	1305.0
15°	1316.6	1307.1	1280.6	1278.5	1271.1
17.5°	1291.2	1277.4	1246.7	1241.4	1230.8
20°	1260.5	1246.7	1210.6	1202.1	1188.4
22.5°	1226.5	1210.6	1171.4	1157.6	1147.0
25°	1190.5	1171.4	1127.9	1109.9	1099.3
27.5°	1153.4	1130.1	1084.5	1063.3	1048.4
30°	1114.2	1087.7	1037.8	1011.3	994.4
32.5°	1072.8	1042.1	990.1	958.3	942.4
35°	1029.4	995.4	942.4	906.4	887.3
37.5°	983.8	948.8	890.5	851.3	832.2
40°	935.0	900.0	839.6	795.1	776.0
42.5°	888.4	851.3	787.7	742.1	721.9
45°	839.6	800.4	736.8	684.8	665.7
47.5°	789.8	749.5	683.8	629.7	608.5
50°	738.9	697.5	629.7	576.7	556.6
52.5°	686.9	646.7	576.7	522.6	501.4
55°	636.1	593.7	524.7	469.6	449.5
57.5°	586.2	541.7	473.9	417.7	402.8
60°	532.2	489.8	421.9	366.8	349.8
62.5°	483.4	438.9	368.9	319.1	306.4
65°	432.5	386.9	319.1	273.5	260.8
67.5°	379.5	336.1	272.4	232.2	217.3
70°	329.7	285.2	224.7	189.8	179.2
72.5°	276.7	237.5	181.3	152.7	143.1
75°	230.0	190.8	141.0	116.6	110.2
77.5°	181.3	147.4	104.9	88.0	85.9
80°	134.6	103.9	72.1	68.9	67.8
82.5°	94.3	66.8	51.9	49.8	48.8
85°	57.2	36.0	32.9	30.7	30.7
87.5°	24.4	15.9	14.8	13.8	14.8
90°	1.7	7.9	12.5	15.9	17.0
92.5°	14.7	22.1	24.9	26.6	27.2
95°	34.0	39.1	43.1	44.8	44.8
97.5°	54.4	58.9	63.4	65.7	65.7
100°	79.3	81.6	86.7	87.8	87.8
102.5°	105.4	105.9	110.5	112.2	112.7
105°	132.0	132.6	134.8	136.5	138.2
107.5°	159.8	160.3	160.9	163.2	162.6
110°	188.1	189.2	188.6	187.5	189.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	217.5	217.5	216.4	216.4	216.4
115°	247.0	247.0	245.9	245.3	244.7
117.5°	274.8	274.8	274.2	272.5	270.8
120°	302.5	304.8	303.1	300.3	301.4
122.5°	331.4	332.0	331.4	329.7	326.9
125°	359.7	359.7	359.2	358.0	356.9
127.5°	385.2	386.9	385.8	384.7	384.1
130°	412.4	414.1	414.1	413.0	410.7
132.5°	440.2	441.3	440.7	439.6	439.1
135°	464.0	467.4	467.4	466.2	464.5
137.5°	490.6	492.3	493.4	491.7	492.3
140°	517.2	518.4	518.4	517.8	517.2
142.5°	541.6	542.7	542.2	542.2	542.2
145°	563.7	565.9	566.5	565.9	564.3
147.5°	586.3	589.2	588.6	588.0	587.5
150°	606.7	609.0	609.0	609.0	608.4
152.5°	626.0	627.1	627.7	629.4	627.7
155°	645.8	645.8	645.3	647.5	645.3
157.5°	662.8	661.7	661.7	663.4	661.7
160°	677.6	677.0	676.4	678.1	675.3
162.5°	691.2	689.5	688.9	692.3	689.5
165°	703.0	701.3	700.2	703.6	701.3
167.5°	712.7	710.4	710.4	713.8	710.4
170°	720.6	717.8	718.3	721.7	717.8
172.5°	726.3	724.0	724.0	728.0	724.0
175°	731.4	728.5	728.0	731.9	728.0
177.5°	733.6	730.8	730.8	734.8	730.2
180°	732.5	732.5	732.5	732.5	732.5

(END OF REPORT)