

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: P1026648

Luminaire Tested: S124RDIP-B795D590UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026648
REPORT IS A COMBINATION OF REPORTS P999778 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B795D590UB50-4F0-XX-W2A-F4
Description: Define 4 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

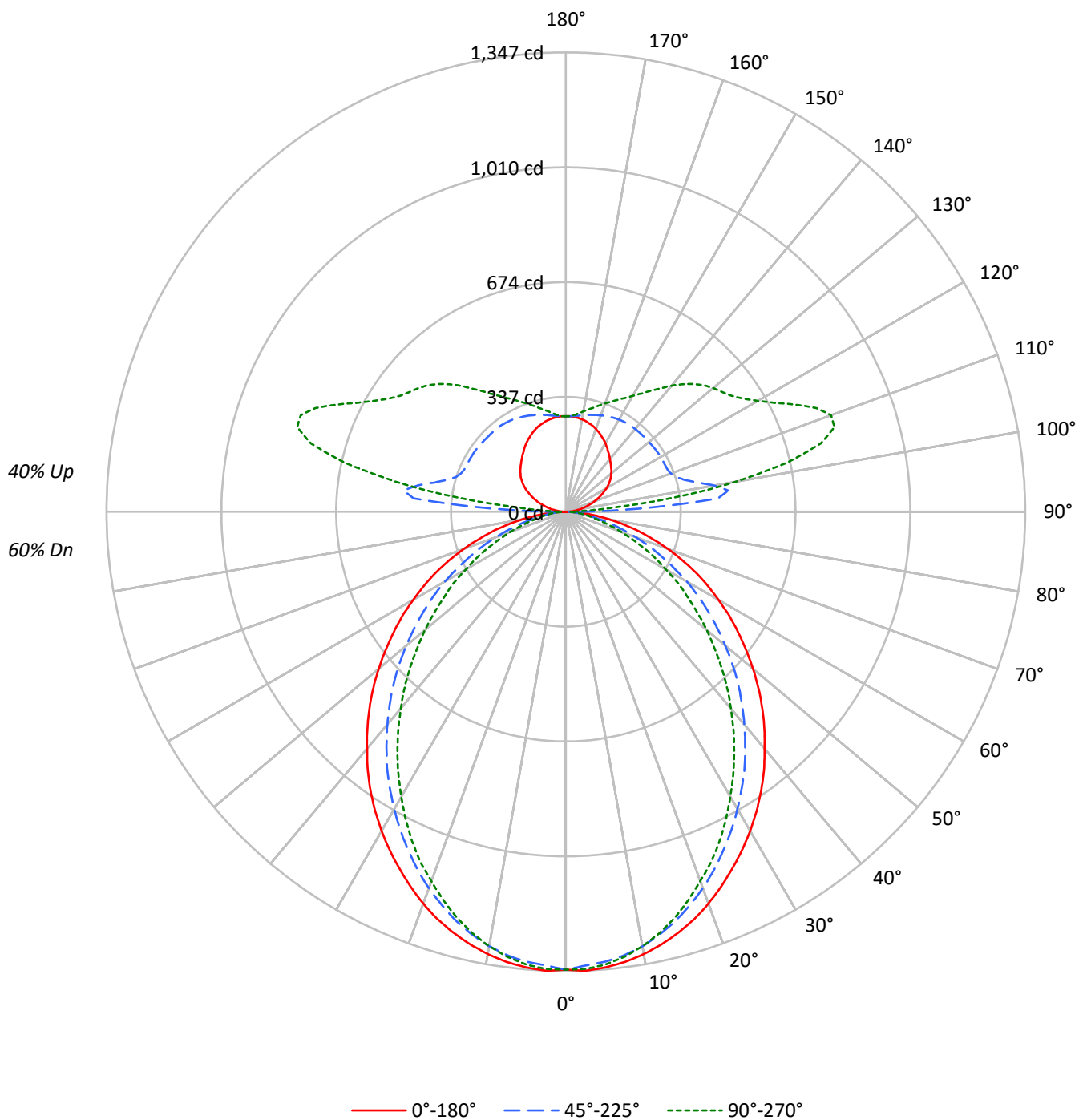
Lumens per Lamp: N/A
Luminaire Lumens: 5146.1 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	102	102	102	102	89	89	89	77	77	77	66	66	66
1	100	96	92	89	94	90	87	84	79	76	74	68	66	65	59	57	56
2	92	84	78	73	86	79	74	69	69	65	62	60	57	55	52	50	48
3	84	74	67	61	78	70	63	58	61	56	52	54	50	47	46	43	41
4	77	66	58	52	72	62	55	50	55	49	45	48	44	40	42	38	36
5	71	59	51	45	66	56	48	43	49	43	39	43	39	35	38	34	31
6	65	53	45	39	61	50	43	38	44	39	34	39	34	31	34	30	28
7	60	48	40	35	56	46	38	33	40	35	30	36	31	27	31	28	25
8	56	44	36	31	53	42	34	29	37	31	27	33	28	25	29	25	22
9	52	40	33	28	49	38	31	26	34	28	24	30	26	22	27	23	20
10	49	37	30	25	46	35	28	24	31	26	22	28	23	20	25	21	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10951	10951	10951
5°	10952	10625	10627
10°	10859	10290	10168
15°	10710	9873	9627
20°	10514	9397	9009
25°	10271	8883	8406
30°	10031	8360	7729
35°	9769	7828	7068
40°	9456	7257	6388
45°	9163	6690	5716
50°	8829	6071	5031
55°	8469	5436	4326
60°	8069	4762	3629
65°	7682	3988	2959
70°	7135	3175	2261
75°	6429	2310	1581
80°	5371	1418	1137
85°	4039	817	625

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9163 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.3	2.5
10°-20°	352.1	6.8
20°-30°	508.3	9.9
30°-40°	576.1	11.2
40°-50°	556.3	10.8
50°-60°	462.5	9.0
60°-70°	319.2	6.2
70°-80°	161.3	3.1
80°-90°	42.0	0.8
90°-100°	207.8	4.0
100°-110°	422.7	8.2
110°-120°	376.8	7.3
120°-130°	316.5	6.2
130°-140°	264.1	5.1
140°-150°	201.7	3.9
150°-160°	141.8	2.8
160°-170°	83.4	1.6
170°-180°	27.1	0.5
0°-30°	986.7	19.2
0°-40°	1562.8	30.4
0°-60°	2581.6	50.2
0°-90°	3104.1	60.3
90°-120°	1007.4	19.6
90°-150°	1789.7	34.8
90°-180°	2042.0	39.7
0°-180°	5146.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1343	1343	1343	1343	1343	
5°	1341	1337	1324	1335	1333	127
15°	1277	1268	1242	1240	1233	360
25°	1155	1136	1094	1077	1066	532
35°	998	966	914	879	861	624
45°	814	776	715	664	646	628
55°	617	576	509	456	436	552
65°	420	375	310	265	253	414
75°	223	185	137	113	107	235
85°	56	35	32	30	30	61
90°	0	4	10	11	12	4
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1342.9	1342.9	1342.9	1342.9	1342.9
2.5°	1347.1	1342.9	1331.6	1342.9	1341.9
5°	1340.9	1336.8	1324.4	1334.7	1332.7
7.5°	1331.6	1327.5	1312.1	1319.3	1316.2
10°	1317.2	1312.1	1293.6	1297.7	1293.6
12.5°	1298.7	1292.6	1269.9	1272.0	1265.8
15°	1277.1	1267.9	1242.2	1240.1	1232.9
17.5°	1252.4	1239.1	1209.3	1204.1	1193.8
20°	1222.6	1209.3	1174.3	1166.1	1152.7
22.5°	1189.7	1174.3	1136.3	1122.9	1112.6
25°	1154.8	1136.3	1094.1	1076.6	1066.3
27.5°	1118.8	1096.1	1051.9	1031.4	1017.0
30°	1080.7	1055.0	1006.7	981.0	964.5
32.5°	1040.6	1010.8	960.4	929.6	914.1
35°	998.5	965.6	914.1	879.2	860.7
37.5°	954.2	920.3	863.8	825.7	807.2
40°	906.9	873.0	814.4	771.2	752.7
42.5°	861.7	825.7	764.0	719.8	700.3
45°	814.4	776.4	714.7	664.3	645.8
47.5°	766.1	727.0	663.2	610.8	590.2
50°	716.7	676.6	610.8	559.4	539.8
52.5°	666.3	627.3	559.4	506.9	486.4
55°	617.0	575.8	509.0	455.5	436.0
57.5°	568.6	525.5	459.6	405.1	390.7
60°	516.2	475.1	409.3	355.8	339.3
62.5°	468.9	425.7	357.8	309.5	297.2
65°	419.5	375.3	309.5	265.3	253.0
67.5°	368.1	326.0	264.3	225.2	210.8
70°	319.8	276.6	218.0	184.1	173.8
72.5°	268.4	230.3	175.8	148.1	138.8
75°	223.1	185.1	136.8	113.1	106.9
77.5°	175.8	142.9	101.8	85.3	83.3
80°	130.6	100.8	69.9	66.8	65.8
82.5°	91.5	64.8	50.4	48.3	47.3
85°	55.5	35.0	31.9	29.8	29.8
87.5°	23.7	15.4	14.4	13.4	14.4
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



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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)