

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: P1026646

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026646
REPORT IS A COMBINATION OF REPORTS P999776 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-F
Description: Define 4 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

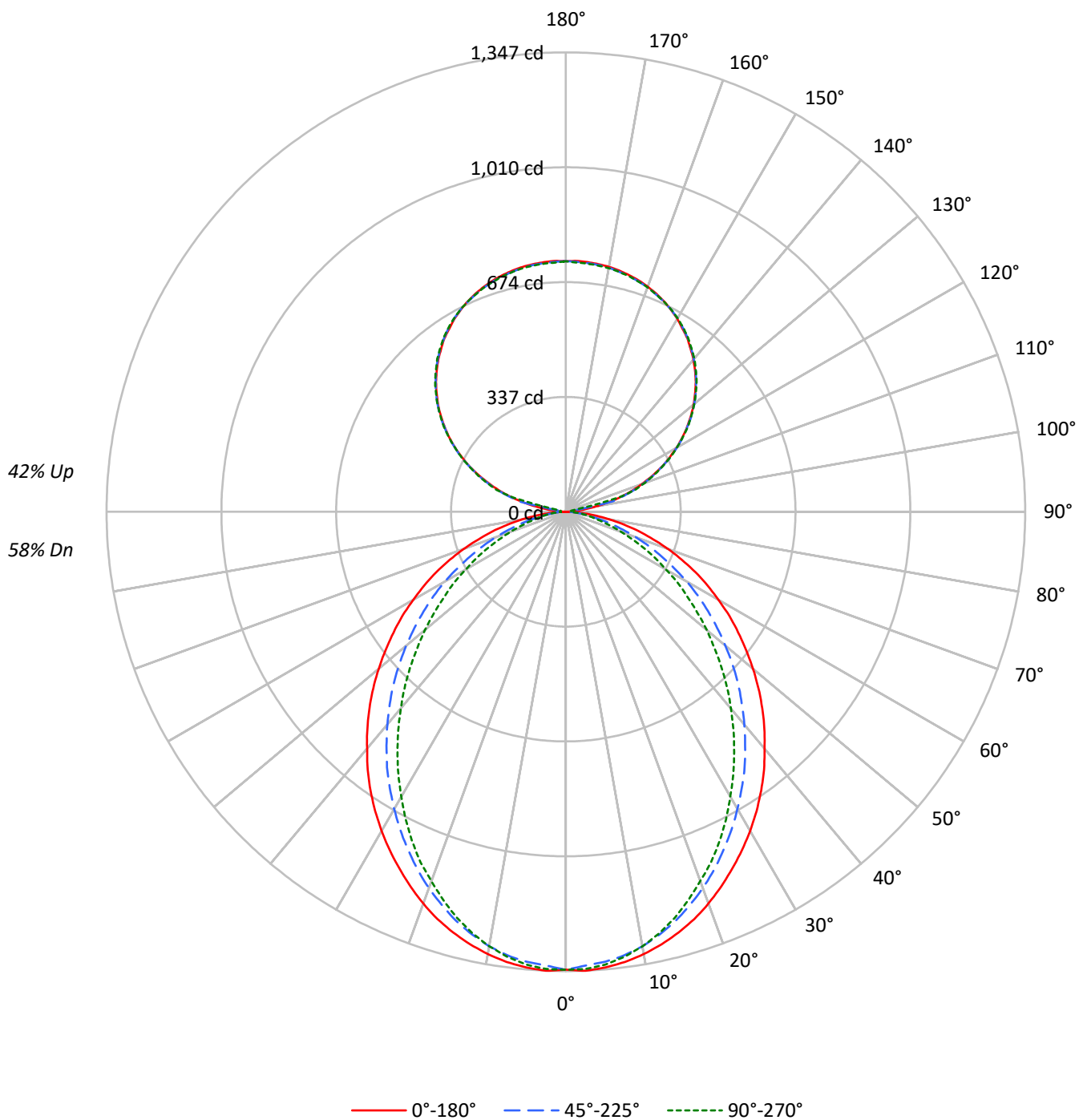
Lumens per Lamp: N/A
Luminaire Lumens: 5378.0 lumens
Efficiency: N/A
Efficacy: 104.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63
1	100	96	92	88	93	89	86	83	77	75	73	66	65	63	56	55	54
2	91	84	78	73	85	78	73	69	68	64	61	59	56	53	50	48	46
3	83	74	67	61	77	69	63	58	60	55	51	52	48	45	45	42	39
4	76	66	58	52	71	62	55	49	54	48	44	47	42	39	40	37	34
5	70	59	51	45	65	55	48	42	48	43	38	42	38	34	36	33	30
6	65	53	45	39	60	50	42	37	44	38	34	38	34	30	33	29	27
7	60	48	40	34	56	45	38	33	40	34	30	35	30	27	30	26	24
8	56	43	36	30	52	41	34	29	36	31	26	32	27	24	28	24	21
9	52	40	32	27	49	38	31	26	33	28	24	29	25	22	26	22	19
10	49	37	29	25	45	35	28	24	31	25	22	27	23	20	24	20	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	2.3
10°-20°	352.1	6.5
20°-30°	508.3	9.5
30°-40°	576.1	10.7
40°-50°	556.3	10.3
50°-60°	462.5	8.6
60°-70°	319.2	5.9
70°-80°	161.3	3.0
80°-90°	42.5	0.8
90°-100°	24.4	0.5
100°-110°	160.6	3.0
110°-120°	306.7	5.7
120°-130°	389.4	7.2
130°-140°	416.5	7.7
140°-150°	389.5	7.2
150°-160°	314.1	5.8
160°-170°	202.6	3.8
170°-180°	69.8	1.3
0°-30°	986.7	18.3
0°-40°	1562.8	29.1
0°-60°	2581.6	48.0
0°-90°	3104.5	57.7
90°-120°	491.7	9.1
90°-150°	1687.0	31.4
90°-180°	2273.0	42.3
0°-180°	5378.0	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°	2	8	12	15	16	5
95°	30	12	12	15	16	37
105°	165	169	172	176	157	173
115°	309	310	310	311	311	304
125°	434	436	435	437	437	388
135°	538	538	540	541	542	415
145°	621	623	623	623	624	388
155°	681	681	680	682	680	314
165°	718	716	716	720	715	203
175°	735	731	732	737	730	70
180°	735	735	735	735	735	

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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°	1.6	7.7	12.1	15.4	16.5
92.5°	8.2	7.1	11.5	14.8	14.8
95°	30.2	11.5	12.1	15.4	15.9
97.5°	57.7	69.8	12.1	14.8	15.4
100°	90.1	100.0	24.2	14.8	15.4
102.5°	126.4	133.0	139.6	15.9	15.9
105°	165.4	168.7	171.5	176.4	156.6
107.5°	201.1	202.8	206.6	209.4	211.6
110°	237.4	239.0	242.3	243.4	245.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	272.6	275.9	277.0	276.4	278.6
115°	308.8	310.5	309.9	311.0	311.0
117.5°	341.3	343.5	345.1	344.6	344.6
120°	374.2	376.4	375.9	377.0	375.9
122.5°	405.0	406.1	407.2	407.8	406.7
125°	434.1	436.3	435.2	436.9	437.4
127.5°	462.2	462.7	465.5	464.9	464.4
130°	489.1	489.6	491.3	491.8	491.8
132.5°	513.8	514.9	517.1	517.7	517.1
135°	538.5	538.0	540.2	541.3	542.4
137.5°	560.5	560.5	563.3	564.4	563.8
140°	582.0	583.1	584.1	585.8	586.3
142.5°	601.2	603.4	603.9	605.0	605.0
145°	621.0	622.6	622.6	623.2	624.3
147.5°	636.4	639.7	639.1	639.7	640.2
150°	653.4	655.6	655.0	655.0	655.6
152.5°	667.7	669.3	668.2	669.3	668.8
155°	680.9	681.4	679.8	682.0	680.3
157.5°	692.4	692.4	690.2	693.0	690.2
160°	702.3	700.6	700.1	703.4	700.1
162.5°	711.1	708.9	708.3	711.6	707.8
165°	718.2	715.5	715.5	719.9	714.9
167.5°	724.3	721.5	721.0	725.9	720.4
170°	729.2	725.9	726.5	730.9	725.4
172.5°	732.5	729.2	729.8	734.2	728.1
175°	734.7	731.4	732.0	736.9	730.3
177.5°	736.4	732.5	733.6	738.0	731.4
180°	734.7	734.7	734.7	734.7	734.7

(END OF REPORT)