

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: P1026616

Luminaire Tested: S124RDIP-B795D365UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026616
REPORT IS A COMBINATION OF REPORTS P999736 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B795D365UB50-4F0-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

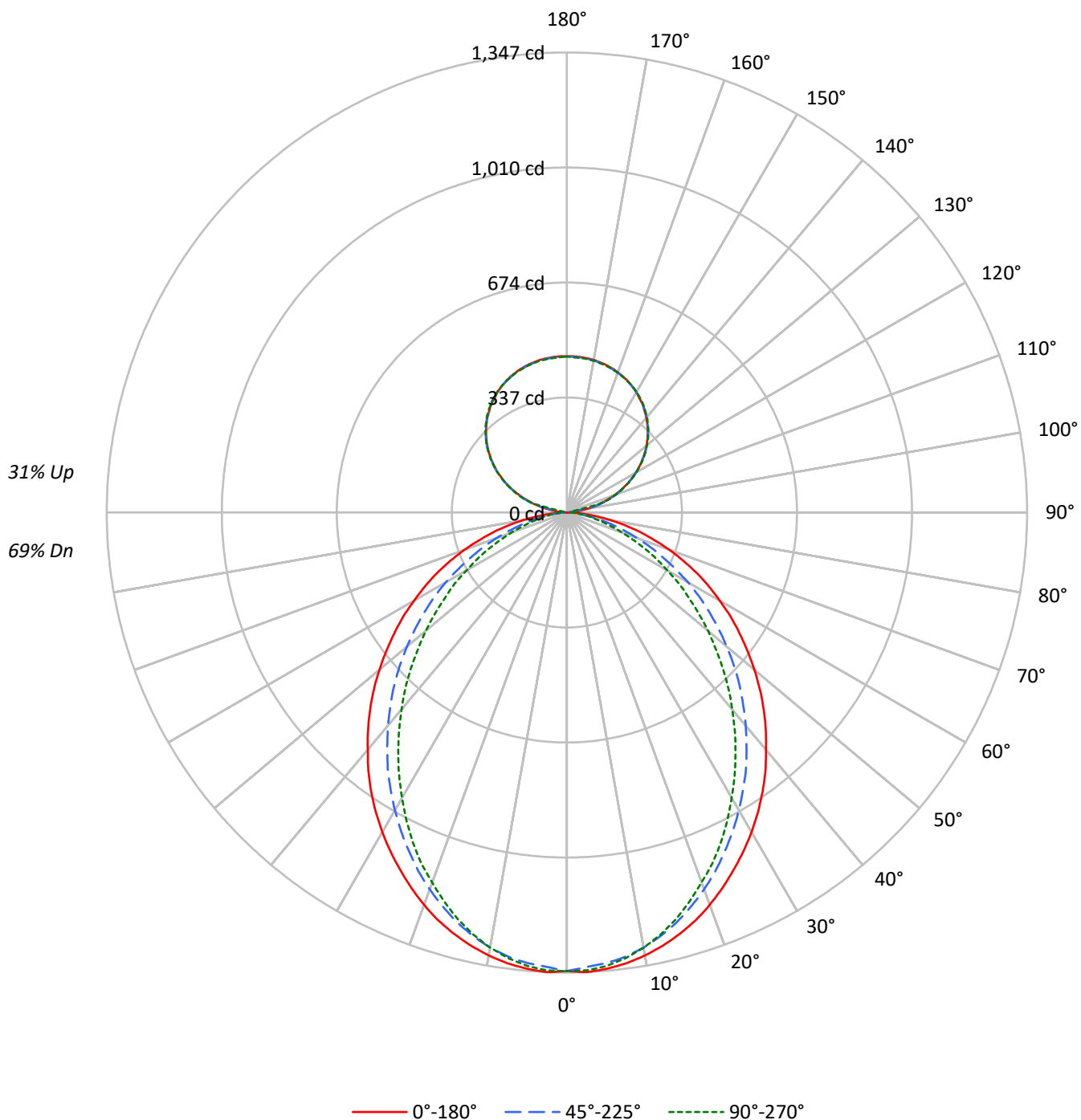
Lumens per Lamp: N/A
Luminaire Lumens: 4518.0 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 45.2
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	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73
1	102	98	94	91	97	93	89	86	83	80	78	74	72	70	65	64	63
2	94	86	80	75	88	82	76	71	73	69	65	65	62	59	58	56	53
3	86	76	69	63	81	72	66	60	65	60	55	58	54	50	52	49	46
4	79	68	60	53	74	64	57	51	58	52	47	52	47	44	46	43	40
5	72	60	52	46	68	58	50	45	52	46	41	47	42	38	42	38	35
6	67	55	46	40	63	52	44	39	47	41	36	43	37	34	38	34	31
7	62	49	41	36	58	47	40	34	43	37	32	39	34	30	35	31	28
8	58	45	37	32	54	43	36	31	39	33	29	36	31	27	32	28	25
9	54	41	34	29	51	40	32	28	36	30	26	33	28	24	30	26	23
10	50	38	31	26	48	36	30	25	33	28	24	30	26	22	28	24	21

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	2.8
10°-20°	352.1	7.8
20°-30°	508.3	11.3
30°-40°	576.1	12.8
40°-50°	556.3	12.3
50°-60°	462.5	10.2
60°-70°	319.2	7.1
70°-80°	161.3	3.6
80°-90°	41.9	0.9
90°-100°	15.2	0.3
100°-110°	99.9	2.2
110°-120°	190.8	4.2
120°-130°	242.2	5.4
130°-140°	259.1	5.7
140°-150°	242.2	5.4
150°-160°	195.4	4.3
160°-170°	126.0	2.8
170°-180°	43.4	1.0
0°-30°	986.7	21.8
0°-40°	1562.8	34.6
0°-60°	2581.6	57.1
0°-90°	3103.9	68.7
90°-120°	305.8	6.8
90°-150°	1049.3	23.2
90°-180°	1414.0	31.3
0°-180°	4518.0	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°	1	5	8	10	10	4
95°	19	7	8	10	10	23
105°	103	105	107	110	97	108
115°	192	193	193	194	194	189
125°	270	271	271	272	272	241
135°	335	335	336	337	337	258
145°	386	387	387	388	388	241
155°	424	424	423	424	423	195
165°	447	445	445	448	445	126
175°	457	455	455	458	454	44
180°	457	457	457	457	457	

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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°	1.0	4.8	7.5	9.6	10.3
92.5°	5.1	4.4	7.2	9.2	9.2
95°	18.8	7.2	7.5	9.6	9.9
97.5°	35.9	43.4	7.5	9.2	9.6
100°	56.1	62.2	15.0	9.2	9.6
102.5°	78.6	82.7	86.8	9.9	9.9
105°	102.9	104.9	106.6	109.7	97.4
107.5°	125.1	126.1	128.5	130.2	131.6
110°	147.7	148.7	150.7	151.4	152.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	169.5	171.6	172.3	171.9	173.3
115°	192.1	193.1	192.8	193.5	193.5
117.5°	212.3	213.6	214.6	214.3	214.3
120°	232.8	234.1	233.8	234.5	233.8
122.5°	251.9	252.6	253.3	253.6	252.9
125°	270.0	271.4	270.7	271.7	272.1
127.5°	287.4	287.8	289.5	289.2	288.8
130°	304.2	304.5	305.6	305.9	305.9
132.5°	319.6	320.3	321.6	322.0	321.6
135°	335.0	334.6	336.0	336.7	337.4
137.5°	348.6	348.6	350.3	351.0	350.7
140°	362.0	362.6	363.3	364.4	364.7
142.5°	373.9	375.3	375.6	376.3	376.3
145°	386.2	387.3	387.3	387.6	388.3
147.5°	395.8	397.8	397.5	397.8	398.2
150°	406.4	407.8	407.4	407.4	407.8
152.5°	415.3	416.3	415.6	416.3	416.0
155°	423.5	423.8	422.8	424.2	423.1
157.5°	430.7	430.7	429.3	431.0	429.3
160°	436.8	435.8	435.4	437.5	435.4
162.5°	442.3	440.9	440.6	442.6	440.2
165°	446.7	445.0	445.0	447.8	444.7
167.5°	450.5	448.8	448.4	451.5	448.1
170°	453.6	451.5	451.9	454.6	451.2
172.5°	455.6	453.6	453.9	456.6	452.9
175°	457.0	454.9	455.3	458.3	454.2
177.5°	458.0	455.6	456.3	459.0	454.9
180°	457.0	457.0	457.0	457.0	457.0

(END OF REPORT)