

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: P1024809

Luminaire Tested: S124DIP-B1020D1035UB27-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024809
REPORT IS A COMBINATION OF REPORTS P995124 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1035UB27-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

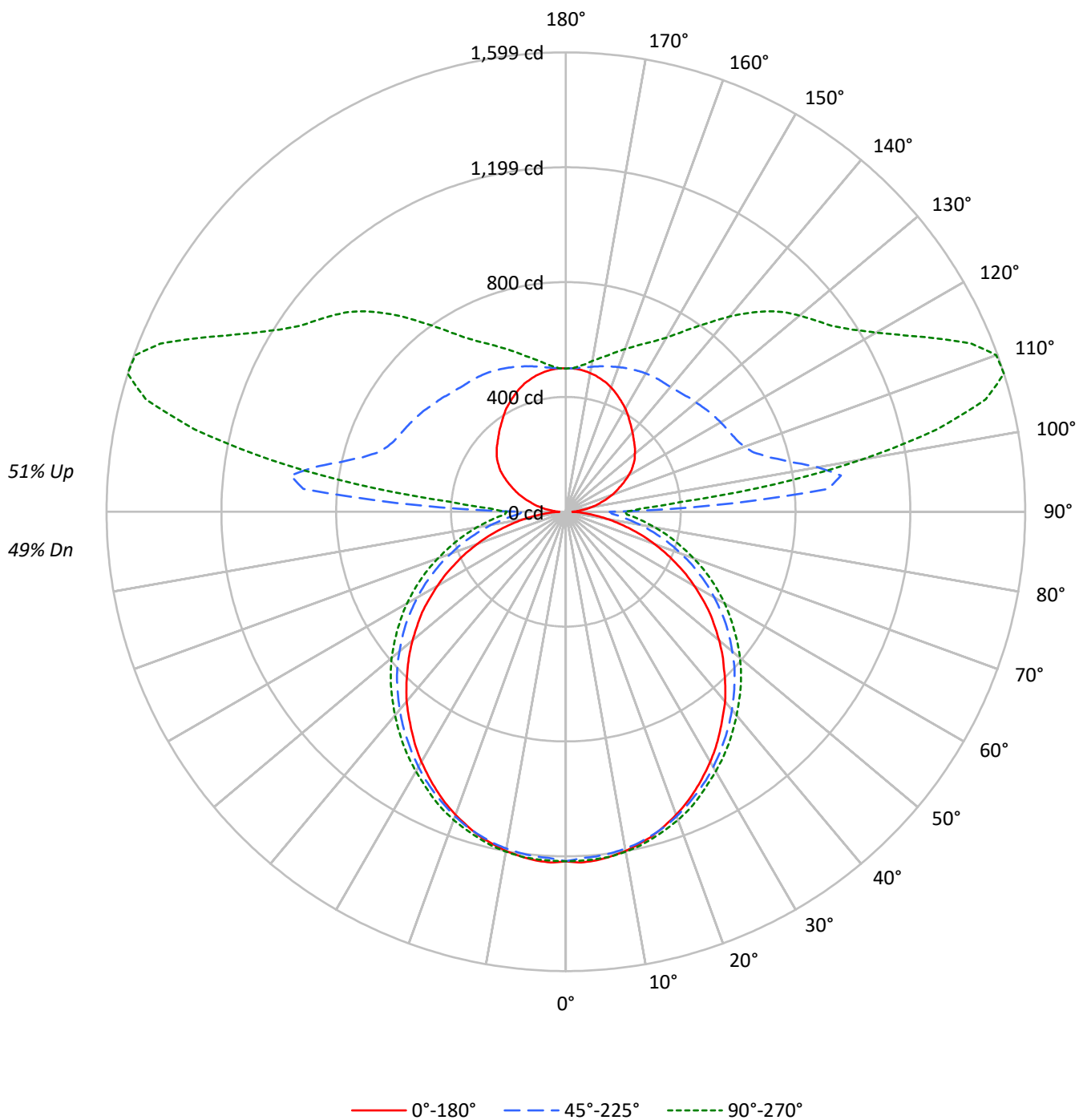
Lumens per Lamp: N/A
Luminaire Lumens: 7789.3 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 75.3
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	55	55	55
1	97	92	88	84	89	85	81	78	71	69	66	59	57	55	47	46	45
2	88	80	73	68	80	73	68	63	62	58	54	51	48	45	41	39	37
3	80	70	62	56	73	64	57	52	54	49	45	45	41	38	36	33	31
4	73	61	53	47	66	57	49	44	48	42	38	40	35	32	32	29	26
5	67	55	46	40	61	50	43	37	43	37	32	35	31	28	29	25	23
6	61	49	40	34	56	45	38	32	38	32	28	32	27	24	26	23	20
7	57	44	36	30	52	41	33	28	35	29	25	29	24	21	24	20	18
8	52	40	32	26	48	37	30	25	32	26	22	26	22	19	22	18	16
9	49	36	29	23	45	34	27	22	29	23	19	24	20	17	20	17	14
10	46	33	26	21	42	31	24	20	27	21	17	22	18	15	19	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9921	9921	9921
5°	9948	9663	9680
10°	9884	9472	9445
15°	9791	9259	9181
20°	9654	9027	8923
25°	9499	8772	8646
30°	9333	8519	8363
35°	9144	8261	8111
40°	8992	8012	7851
45°	8768	7780	7620
50°	8577	7515	7378
55°	8379	7260	7098
60°	8072	6942	6834
65°	7734	6601	6517
70°	7324	6209	6151
75°	6752	5776	5802
80°	6108	5332	5436
85°	5254	4887	5140

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8768 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	1.5
10°-20°	330.3	4.2
20°-30°	499.4	6.4
30°-40°	604.2	7.8
40°-50°	638.7	8.2
50°-60°	601.1	7.7
60°-70°	498.8	6.4
70°-80°	350.0	4.5
80°-90°	199.3	2.6
90°-100°	487.9	6.3
100°-110°	840.4	10.8
110°-120°	729.9	9.4
120°-130°	597.0	7.7
130°-140°	484.9	6.2
140°-150°	362.3	4.7
150°-160°	252.7	3.2
160°-170°	148.6	1.9
170°-180°	48.3	0.6
0°-30°	945.0	12.1
0°-40°	1549.1	19.9
0°-60°	2789.0	35.8
0°-90°	3837.1	49.3
90°-120°	2058.2	26.4
90°-150°	3502.5	45.0
90°-180°	3952.0	50.7
0°-180°	7789.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1218	1214	1204	1215	1214	116
15°	1168	1169	1165	1177	1176	329
25°	1068	1076	1080	1095	1097	492
35°	935	951	965	984	988	585
45°	779	805	831	854	861	602
55°	610	639	680	707	715	544
65°	422	466	512	546	557	419
75°	234	285	342	380	392	249
85°	72	129	191	232	245	75
90°	23	84	152	194	206	17
95°	50	165	917	551	407	50
105°	127	206	733	1508	1513	136
115°	210	274	637	1195	1427	209
125°	287	338	608	1001	1128	256
135°	337	400	578	866	987	261
145°	386	441	562	710	785	243
155°	438	473	547	619	646	202
165°	477	492	524	555	563	135
175°	498	499	503	510	508	47
180°	499	499	499	499	499	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1216.6	1216.6	1216.6	1216.6	1216.6
2.5°	1222.1	1218.0	1207.1	1216.6	1215.3
5°	1218.0	1213.9	1204.4	1215.3	1213.9
7.5°	1209.8	1207.1	1198.9	1211.2	1209.8
10°	1198.9	1197.6	1190.7	1203.0	1201.6
12.5°	1183.9	1183.9	1179.8	1190.7	1190.7
15°	1167.6	1168.9	1164.9	1177.1	1175.8
17.5°	1145.8	1149.9	1148.5	1160.8	1159.4
20°	1122.6	1126.7	1128.1	1141.7	1141.7
22.5°	1096.7	1102.2	1104.9	1118.5	1121.3
25°	1068.1	1076.3	1080.4	1095.4	1096.7
27.5°	1036.8	1049.1	1054.5	1068.1	1069.5
30°	1005.5	1016.4	1025.9	1040.9	1043.6
32.5°	971.4	985.0	995.9	1013.6	1016.4
35°	934.6	951.0	964.6	983.7	987.7
37.5°	897.8	916.9	933.3	952.3	956.4
40°	862.4	880.1	899.2	919.6	925.1
42.5°	821.5	842.0	865.1	888.3	892.4
45°	779.3	805.2	831.1	854.2	861.0
47.5°	739.8	765.7	795.6	818.8	827.0
50°	696.2	726.2	756.1	783.4	791.6
52.5°	652.6	682.6	718.0	745.2	753.4
55°	610.4	639.0	679.8	707.1	715.3
57.5°	562.7	598.1	637.6	670.3	677.1
60°	516.4	551.8	596.7	628.1	639.0
62.5°	471.4	510.9	555.9	587.2	598.1
65°	422.3	465.9	512.3	546.3	557.2
67.5°	376.0	422.3	471.4	505.5	516.4
70°	328.3	374.7	426.4	463.2	472.8
72.5°	282.0	329.7	385.6	421.0	431.9
75°	234.3	284.7	342.0	380.1	392.4
77.5°	189.4	242.5	302.5	340.6	354.2
80°	148.5	203.0	262.9	303.8	314.7
82.5°	107.6	164.9	224.8	267.0	279.3
85°	72.2	129.4	190.7	231.6	245.2
87.5°	45.0	100.8	160.8	200.3	212.5
90°	22.8	84.1	152.5	194.0	205.9
92.5°	34.1	143.6	510.8	291.8	265.0
95°	50.0	164.6	917.0	550.6	406.7
97.5°	70.2	168.6	966.0	954.4	733.5
100°	89.5	177.8	891.2	1257.1	1048.3
102.5°	109.1	190.0	801.1	1443.1	1323.7
105°	126.9	205.6	732.6	1507.9	1513.4
107.5°	149.5	223.0	685.6	1479.0	1599.2
110°	170.6	239.2	661.6	1392.4	1594.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	190.8	256.6	645.9	1288.2	1528.4
115°	210.0	273.6	637.1	1195.2	1427.1
117.5°	231.6	290.6	629.4	1119.4	1329.2
120°	251.7	305.8	622.6	1065.8	1246.6
122.5°	271.3	321.8	614.8	1029.0	1179.7
125°	286.6	338.2	608.3	1001.2	1128.4
127.5°	302.3	355.8	599.5	973.0	1094.1
130°	313.7	371.6	591.8	942.0	1062.4
132.5°	326.4	386.2	585.4	906.9	1029.2
135°	336.8	400.4	577.6	865.9	986.7
137.5°	348.5	411.4	572.1	823.8	938.4
140°	361.3	422.6	567.0	782.6	887.4
142.5°	373.7	433.0	564.3	745.4	833.6
145°	386.4	440.9	562.4	709.7	784.6
147.5°	401.1	449.7	559.4	678.9	738.7
150°	414.8	458.0	556.5	655.4	699.5
152.5°	426.2	465.8	551.6	636.8	670.1
155°	437.9	472.8	546.7	619.2	645.6
157.5°	449.7	479.1	541.8	602.5	623.1
160°	460.5	484.5	535.9	585.9	602.5
162.5°	470.3	488.9	530.0	569.7	582.9
165°	477.1	491.8	524.2	555.0	563.3
167.5°	485.0	494.2	518.3	542.3	547.7
170°	489.9	496.2	512.4	529.6	533.0
172.5°	494.8	497.7	506.5	518.3	518.3
175°	497.7	498.7	502.6	509.5	507.5
177.5°	499.7	498.7	499.7	503.1	499.7
180°	498.7	498.7	498.7	498.7	498.7

(END OF REPORT)