

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: P1024988

Luminaire Tested: S124DIP-B1020D810UB27-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024988
REPORT IS A COMBINATION OF REPORTS P995363 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D810UB27-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

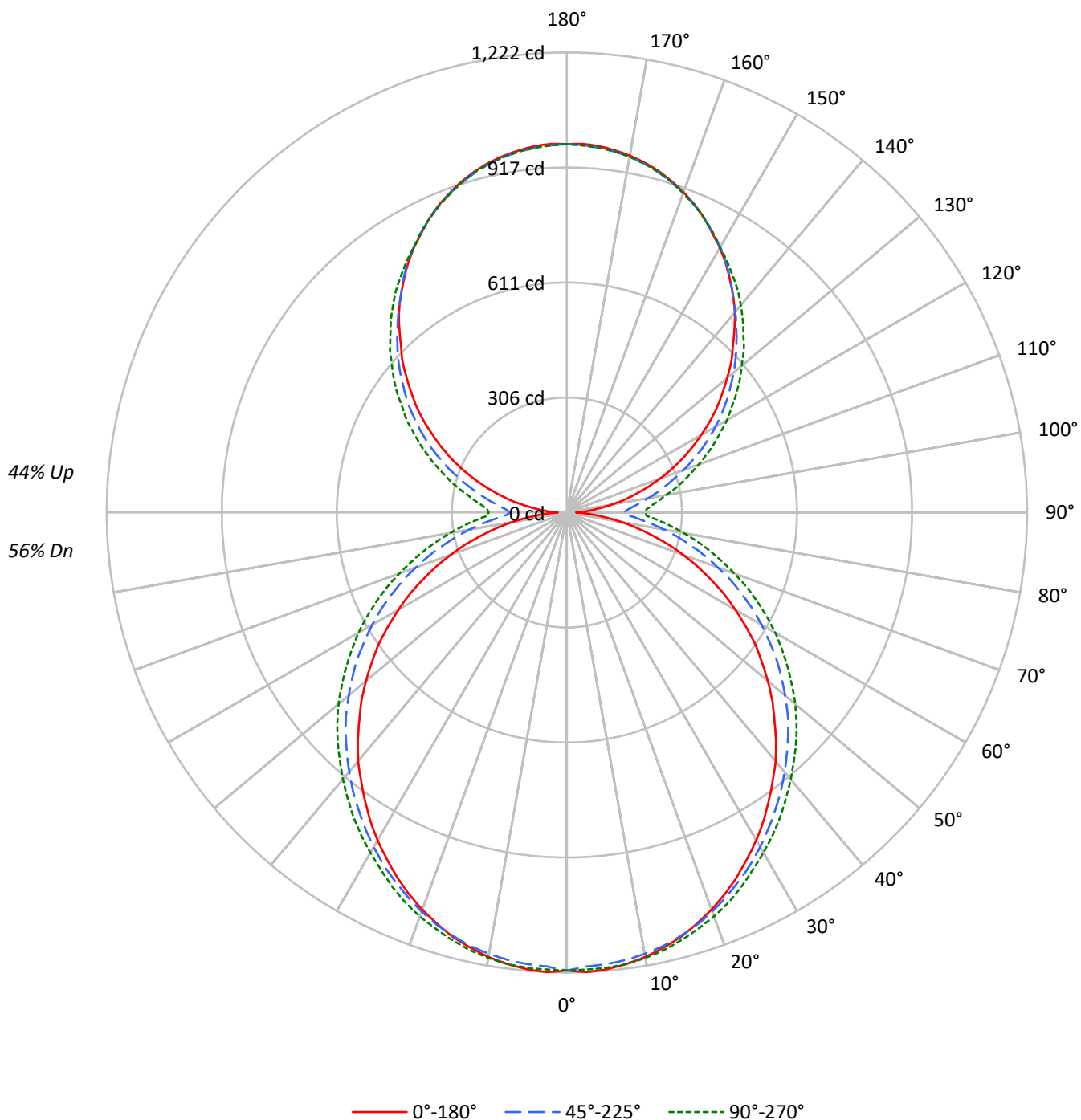
Lumens per Lamp: N/A
Luminaire Lumens: 6866.0 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 67.9
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	101	101	101	101	87	87	87	74	74	74	62	62	62
1	98	93	89	85	91	87	83	79	74	71	69	63	61	59	53	51	50
2	89	81	74	68	82	75	69	64	64	60	56	55	51	48	46	43	41
3	81	71	63	56	74	66	59	53	56	51	47	48	44	40	40	37	34
4	74	62	54	47	68	58	50	45	50	44	39	42	38	34	36	32	29
5	67	55	47	40	62	52	44	38	45	38	34	38	33	29	32	28	25
6	62	49	41	35	57	46	39	33	40	34	29	34	29	26	29	25	22
7	57	45	36	30	53	42	34	29	36	30	26	31	26	23	26	22	20
8	53	40	32	27	49	38	31	25	33	27	23	28	24	20	24	20	17
9	50	37	29	24	46	35	28	23	30	24	20	26	21	18	22	18	16
10	46	34	26	21	43	32	25	20	28	22	18	24	19	16	21	17	14

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	1.7
10°-20°	330.3	4.8
20°-30°	499.4	7.3
30°-40°	604.2	8.8
40°-50°	638.7	9.3
50°-60°	601.1	8.8
60°-70°	498.8	7.3
70°-80°	350.0	5.1
80°-90°	199.4	2.9
90°-100°	181.3	2.6
100°-110°	278.1	4.1
110°-120°	383.0	5.6
120°-130°	461.0	6.7
130°-140°	495.1	7.2
140°-150°	475.5	6.9
150°-160°	397.5	5.8
160°-170°	264.5	3.9
170°-180°	92.6	1.3
0°-30°	945.0	13.8
0°-40°	1549.1	22.6
0°-60°	2789.0	40.6
0°-90°	3837.3	55.9
90°-120°	842.4	12.3
90°-150°	2274.0	33.1
90°-180°	3029.0	44.1
0°-180°	6866.0	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°	24	87	152	196	208	18
95°	63	115	176	215	227	63
105°	189	217	270	306	320	201
115°	338	350	392	422	430	334
125°	486	485	518	542	549	434
135°	623	627	637	657	663	482
145°	755	756	757	764	768	472
155°	863	863	862	865	862	397
165°	940	937	936	940	937	265
175°	977	974	973	978	973	93
180°	979	979	979	979	979	

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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°	24.1	86.9	151.6	195.6	208.0
92.5°	40.1	97.6	160.0	200.5	212.1
95°	63.1	114.9	176.0	215.1	227.4
97.5°	89.0	134.6	196.5	234.9	247.2
100°	121.0	159.4	219.3	257.6	267.2
102.5°	155.8	186.6	244.3	282.1	293.7
105°	188.7	216.6	270.1	306.4	319.6
107.5°	225.8	249.6	298.1	335.2	344.0
110°	262.2	282.8	329.8	359.6	372.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	300.2	316.6	360.0	390.0	400.9
115°	338.3	350.5	392.5	421.8	430.5
117.5°	375.4	383.5	423.6	449.9	458.6
120°	411.1	418.2	455.4	478.9	491.3
122.5°	449.7	450.4	486.5	511.4	517.2
125°	486.1	484.8	518.1	542.4	549.1
127.5°	520.2	521.1	546.8	569.9	578.7
130°	555.2	556.1	577.9	600.9	606.0
132.5°	592.3	592.4	608.1	629.7	637.1
135°	622.7	627.2	636.8	657.1	663.0
137.5°	658.3	659.3	666.2	684.3	692.0
140°	693.9	694.1	695.4	712.3	718.4
142.5°	725.1	726.6	724.5	739.5	744.9
145°	754.6	756.3	757.0	764.5	767.6
147.5°	784.9	787.3	786.6	787.2	791.8
150°	812.2	813.8	813.8	813.8	813.0
152.5°	836.5	838.0	838.8	841.1	838.8
155°	863.0	863.0	862.3	865.3	862.3
157.5°	885.7	884.2	884.2	886.5	884.2
160°	905.4	904.6	903.9	906.2	902.4
162.5°	923.6	921.3	920.5	925.1	921.3
165°	939.5	937.2	935.7	940.2	937.2
167.5°	952.3	949.3	949.3	953.9	949.3
170°	962.9	959.2	959.9	964.5	959.2
172.5°	970.5	967.5	967.5	972.8	967.5
175°	977.3	973.5	972.8	978.1	972.8
177.5°	980.3	976.6	976.6	981.9	975.8
180°	978.8	978.8	978.8	978.8	978.8

(END OF REPORT)