

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: P1024989

Luminaire Tested: S124DIP-B1020D810UB27-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024989
REPORT IS A COMBINATION OF REPORTS P995364 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D810UB27-4F0-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

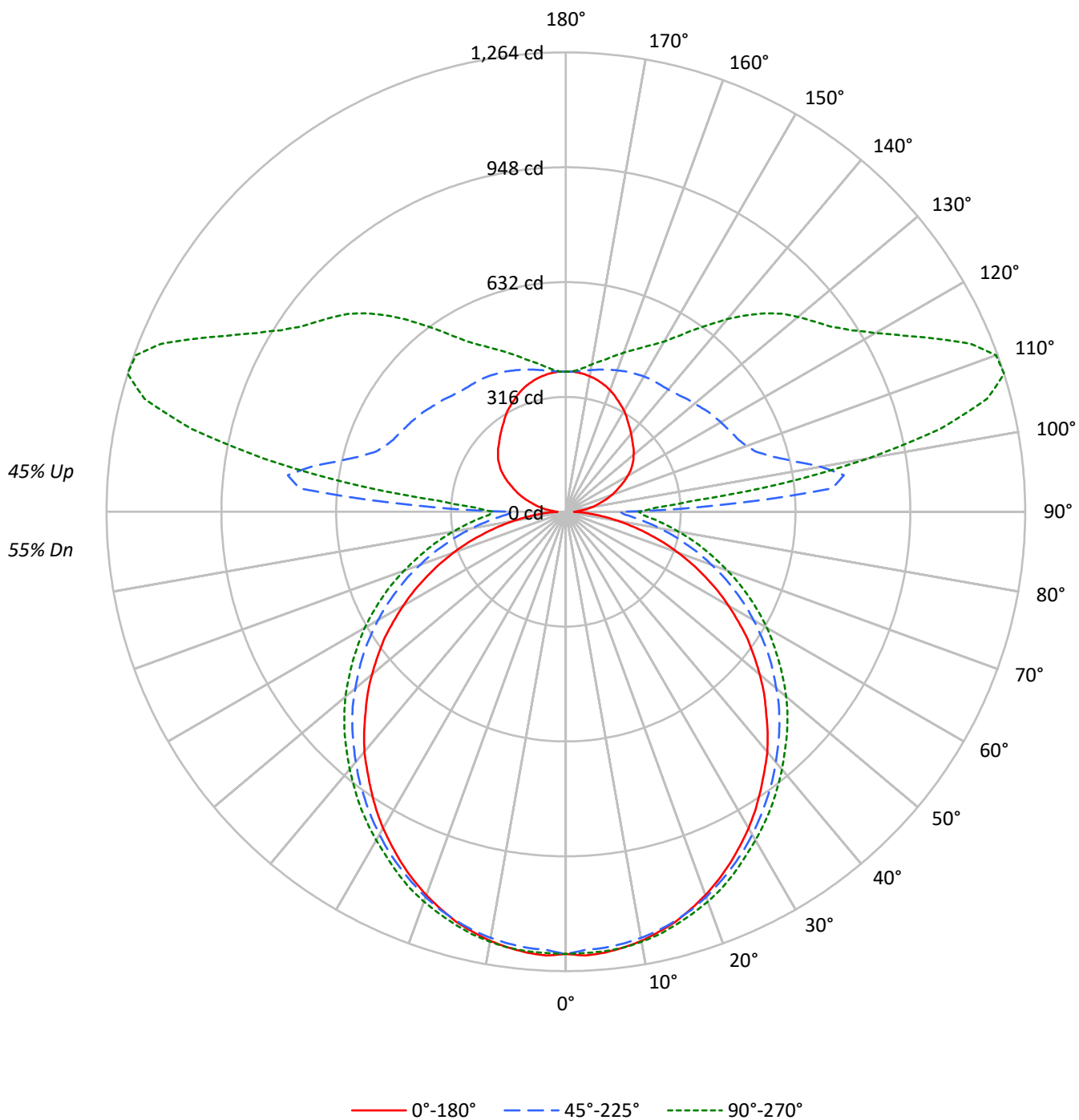
Lumens per Lamp: N/A
Luminaire Lumens: 6961.6 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61
1	98	93	89	85	91	86	83	79	74	71	69	63	60	59	52	51	49
2	89	81	74	68	82	75	69	64	64	60	56	54	51	48	45	43	41
3	81	70	63	56	74	65	59	53	56	51	46	48	43	40	40	37	34
4	74	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29
5	67	55	47	40	62	51	44	38	44	38	34	38	33	29	32	28	25
6	62	49	41	35	57	46	38	33	40	34	29	34	29	25	28	25	22
7	57	45	36	30	53	42	34	29	36	30	26	31	26	22	26	22	19
8	53	40	32	27	49	38	30	25	33	27	23	28	23	20	24	20	17
9	49	37	29	24	46	34	27	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	20	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	4.7
20°-30°	499.4	7.2
30°-40°	604.2	8.7
40°-50°	638.7	9.2
50°-60°	601.1	8.6
60°-70°	498.8	7.2
70°-80°	350.0	5.0
80°-90°	198.8	2.9
90°-100°	403.7	5.8
100°-110°	669.2	9.6
110°-120°	577.3	8.3
120°-130°	468.8	6.7
130°-140°	377.9	5.4
140°-150°	280.6	4.0
150°-160°	195.3	2.8
160°-170°	114.8	1.6
170°-180°	37.3	0.5
0°-30°	945.0	13.6
0°-40°	1549.1	22.3
0°-60°	2789.0	40.1
0°-90°	3836.7	55.1
90°-120°	1650.2	23.7
90°-150°	2777.5	39.9
90°-180°	3125.0	44.9
0°-180°	6961.6	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	82	148	190	201	17
95°	43	141	736	461	352	41
105°	101	168	586	1193	1200	108
115°	164	216	507	945	1126	163
125°	223	262	479	788	888	199
135°	261	310	449	677	772	202
145°	299	341	434	550	609	188
155°	338	365	422	478	499	156
165°	369	380	405	429	435	104
175°	385	385	388	394	392	37
180°	385	385	385	385	385	

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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°	22.6	82.4	148.5	189.5	201.2
92.5°	31.0	126.4	423.5	263.0	244.7
95°	42.7	141.4	735.5	460.8	352.3
97.5°	57.9	143.0	771.8	770.9	603.0
100°	72.5	148.8	712.2	1003.3	844.1
102.5°	87.7	157.0	641.0	1145.2	1055.3
105°	100.9	167.8	586.5	1193.3	1200.1
107.5°	118.3	180.4	548.7	1169.5	1264.5
110°	134.3	191.6	528.9	1100.8	1259.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	149.6	204.2	515.2	1018.4	1206.4
115°	164.2	216.1	506.9	945.0	1126.3
117.5°	180.8	228.3	499.3	884.5	1049.1
120°	196.1	238.8	492.5	841.2	983.4
122.5°	211.2	250.2	485.0	811.2	929.8
125°	222.7	262.2	478.7	788.1	888.3
127.5°	234.8	275.9	470.4	764.5	860.3
130°	243.3	287.7	462.8	739.0	833.9
132.5°	253.2	299.1	456.7	710.3	806.7
135°	260.9	310.0	449.1	676.8	772.0
137.5°	269.9	318.2	443.6	642.7	732.8
140°	279.8	326.9	438.8	609.4	691.9
142.5°	289.1	334.9	436.1	579.4	648.7
145°	298.9	340.6	434.5	550.2	609.4
147.5°	310.3	347.5	432.3	524.9	572.3
150°	320.9	353.9	430.0	506.4	540.5
152.5°	329.3	360.0	426.2	492.1	517.8
155°	338.4	365.3	422.4	478.4	498.9
157.5°	347.5	370.2	418.6	465.6	481.5
160°	355.8	374.4	414.1	452.7	465.6
162.5°	363.4	377.8	409.6	440.2	450.4
165°	368.7	380.0	405.0	428.9	435.3
167.5°	374.7	381.9	400.5	419.0	423.2
170°	378.5	383.5	395.9	409.2	411.8
172.5°	382.3	384.6	391.4	400.4	400.5
175°	384.6	385.3	388.4	393.7	392.1
177.5°	386.1	385.3	386.1	388.8	386.1
180°	385.3	385.3	385.3	385.3	385.3

(END OF REPORT)