

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: P1008798

Luminaire Tested: S122DIP-B290D1080UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1008798
REPORT IS A COMBINATION OF REPORTS P983868 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIP-B290D1080UB40-4F0-XX-W2A-F4
Description: Define 2 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

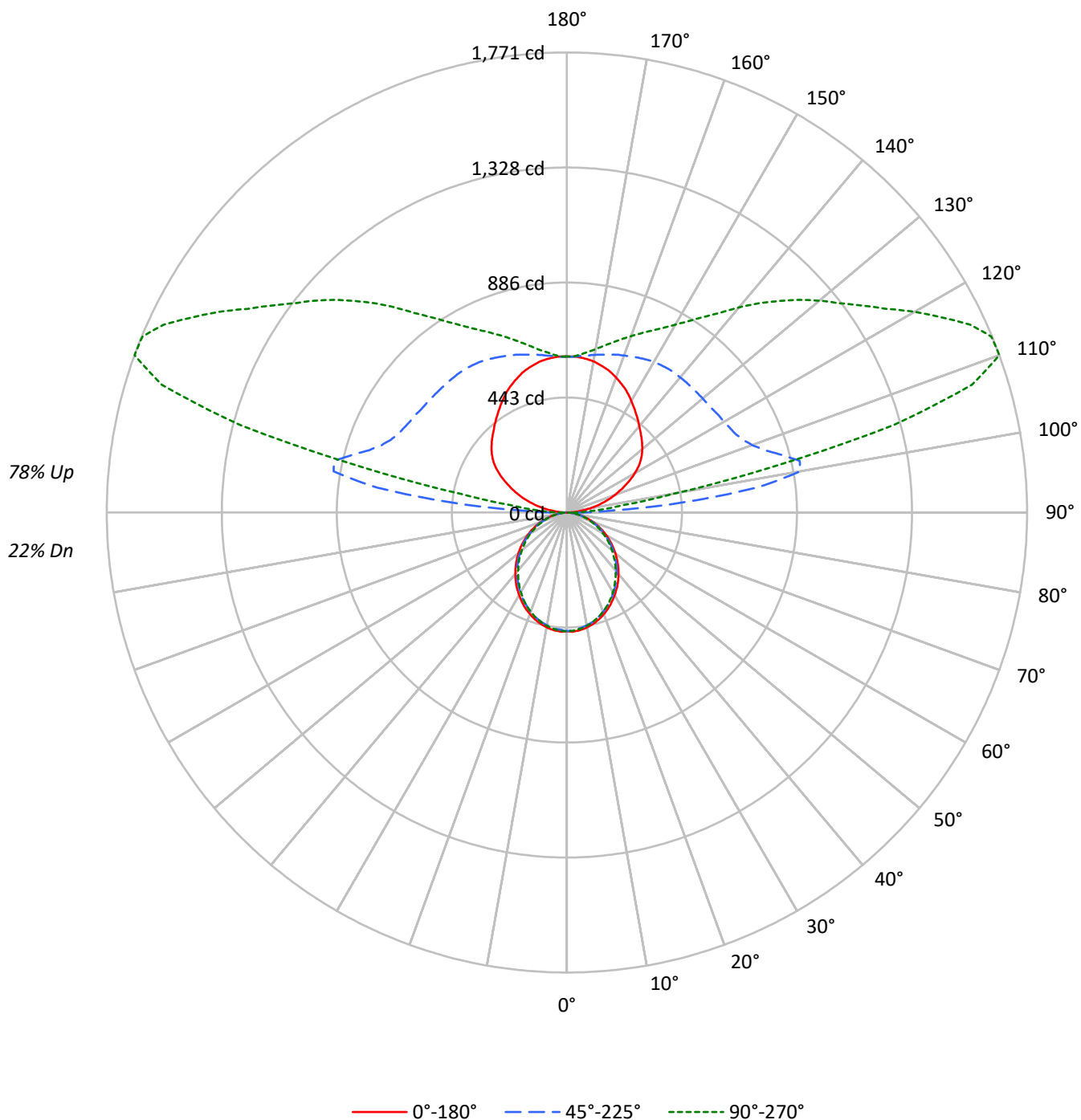
Lumens per Lamp: N/A
Luminaire Lumens: 5351.8 lumens
Efficiency: N/A
Efficacy: 111.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 48
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	50	30	10
RCR																				
0	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	30	30	22
1	91	87	84	80	81	77	74	72	59	57	55	42	41	40	27	26	25	25	25	18
2	83	76	70	65	73	68	63	59	52	48	46	37	35	33	23	22	21	21	21	15
3	76	67	60	54	67	59	54	49	46	42	38	33	30	28	21	19	18	18	18	13
4	69	59	52	46	61	53	46	41	40	36	33	29	26	24	19	17	16	16	16	11
5	63	52	45	39	56	47	40	35	36	31	28	26	23	21	17	15	14	14	14	10
6	58	47	39	34	51	42	35	30	32	28	24	23	20	18	15	13	12	12	12	9
7	54	42	35	29	47	38	31	26	29	24	21	21	18	16	14	12	11	11	11	8
8	50	38	31	26	44	34	28	23	26	22	19	19	16	14	13	11	9	9	9	7
9	46	35	27	23	41	31	25	21	24	20	16	18	15	12	12	10	8	8	8	6
10	43	32	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8	8	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7236	7236	7236
5°	7247	6897	6849
10°	7189	6583	6453
15°	7083	6266	6036
20°	6941	5921	5641
25°	6799	5561	5247
30°	6622	5223	4834
35°	6453	4866	4428
40°	6246	4515	4044
45°	6039	4166	3667
50°	5813	3811	3278
55°	5574	3431	2907
60°	5307	3019	2523
65°	5016	2603	2118
70°	4643	2144	1711
75°	4128	1654	1321
80°	3513	1123	849
85°	2543	521	362

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6039 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.0	0.8
10°-20°	121.1	2.3
20°-30°	177.9	3.3
30°-40°	206.6	3.9
40°-50°	206.4	3.9
50°-60°	179.9	3.4
60°-70°	133.0	2.5
70°-80°	75.3	1.4
80°-90°	23.7	0.4
90°-100°	243.3	4.5
100°-110°	822.6	15.4
110°-120°	864.7	16.2
120°-130°	711.0	13.3
130°-140°	571.4	10.7
140°-150°	431.6	8.1
150°-160°	303.4	5.7
160°-170°	178.7	3.3
170°-180°	58.1	1.1
0°-30°	342.0	6.4
0°-40°	548.6	10.3
0°-60°	934.9	17.5
0°-90°	1166.8	21.8
90°-120°	1930.6	36.1
90°-150°	3644.7	68.1
90°-180°	4185.0	78.2
0°-180°	5351.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	457	457	457	457	457	
5°	457	455	450	454	453	43
15°	435	432	427	429	426	123
25°	394	390	383	384	383	181
35°	340	335	328	326	324	212
45°	276	273	267	262	260	213
55°	209	207	201	196	194	187
65°	141	138	134	130	128	139
75°	74	73	71	68	69	79
85°	18	18	17	16	15	20
90°	1	16	39	38	38	4
95°	40	99	452	171	132	42
105°	141	212	855	1529	1301	150
115°	248	313	716	1477	1712	246
125°	346	410	688	1196	1389	308
135°	406	485	680	1005	1151	314
145°	464	533	676	840	919	291
155°	528	570	657	743	772	243
165°	575	592	629	667	678	162
175°	599	600	605	612	611	57
180°	600	600	600	600	600	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	457.1	457.1	457.1	457.1	457.1
2.5°	459.8	457.6	452.7	457.1	456.2
5°	457.1	455.4	450.5	454.0	453.2
7.5°	454.0	451.4	446.6	450.1	449.2
10°	449.2	446.1	440.9	444.4	443.1
12.5°	442.6	440.0	434.7	436.9	436.0
15°	435.1	432.5	426.8	428.6	426.4
17.5°	425.9	423.3	417.6	419.8	417.6
20°	415.8	413.2	407.0	408.3	406.6
22.5°	405.7	401.7	396.0	396.0	395.1
25°	393.8	390.3	382.8	383.7	382.8
27.5°	380.6	377.6	371.9	370.5	368.3
30°	367.5	363.9	357.3	356.0	354.3
32.5°	353.4	350.8	343.7	341.1	339.3
35°	339.8	335.4	328.3	325.7	323.5
37.5°	324.4	320.4	313.4	310.3	308.1
40°	308.6	305.0	298.0	294.1	292.3
42.5°	293.2	289.7	282.6	278.2	275.6
45°	276.5	273.4	266.8	262.0	260.2
47.5°	260.2	257.1	250.1	245.3	242.6
50°	243.1	240.9	234.7	228.6	226.4
52.5°	226.4	223.3	217.6	212.7	209.7
55°	209.2	206.6	201.3	196.0	193.8
57.5°	192.1	189.9	184.2	178.9	177.1
60°	174.9	173.2	167.0	162.2	160.9
62.5°	158.2	155.2	150.8	146.4	144.6
65°	141.1	138.5	134.1	130.1	127.9
67.5°	123.5	121.3	117.4	114.3	112.5
70°	107.2	105.5	101.5	98.5	96.7
72.5°	90.5	88.8	86.6	83.5	82.2
75°	73.8	73.0	70.8	68.1	69.0
77.5°	58.9	57.1	56.3	54.9	53.6
80°	44.0	43.5	42.6	41.3	40.4
82.5°	29.9	29.9	29.4	27.7	27.7
85°	18.0	17.6	17.1	15.8	15.4
87.5°	7.9	7.0	6.2	4.8	4.4
90°	1.2	15.6	39.2	37.5	38.1
92.5°	17.3	54.8	177.8	81.9	70.4
95°	40.4	99.2	452.5	170.8	131.6
97.5°	60.0	131.0	737.6	342.8	220.5
100°	88.9	160.4	911.9	682.8	413.2
102.5°	115.4	187.0	917.7	1154.4	805.7
105°	140.8	212.4	855.4	1528.9	1300.9
107.5°	168.5	237.8	797.6	1664.5	1634.5
110°	196.2	263.8	758.4	1642.6	1770.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	221.6	288.6	733.0	1568.2	1768.4
115°	248.2	313.4	715.7	1477.0	1711.9
117.5°	275.9	338.2	706.4	1389.8	1626.4
120°	301.3	362.5	698.4	1311.9	1544.5
122.5°	325.5	387.2	693.7	1251.3	1459.1
125°	346.3	409.8	688.0	1196.4	1388.7
127.5°	363.6	431.2	684.5	1149.7	1322.9
130°	378.6	450.2	682.2	1102.4	1268.6
132.5°	392.5	468.6	681.1	1053.3	1212.0
135°	406.3	484.8	679.9	1005.4	1150.9
137.5°	419.0	498.7	679.9	957.0	1092.0
140°	434.0	511.4	678.7	914.2	1030.8
142.5°	449.0	521.8	678.7	873.2	969.6
145°	464.0	533.3	676.4	839.8	918.8
147.5°	480.2	542.6	673.0	810.3	873.8
150°	496.4	551.8	669.5	785.0	834.6
152.5°	512.5	561.0	663.7	763.6	801.1
155°	527.5	569.6	656.8	742.8	772.2
157.5°	540.2	576.6	649.9	723.2	746.8
160°	552.9	583.6	643.0	703.6	722.6
162.5°	565.6	588.7	637.2	685.1	699.5
165°	574.9	592.2	629.1	667.2	677.6
167.5°	582.9	595.6	622.2	651.0	656.8
170°	591.0	597.4	616.4	636.0	638.3
172.5°	595.6	599.0	609.5	622.8	623.3
175°	599.1	599.7	604.9	612.3	610.6
177.5°	601.4	600.2	600.2	604.9	601.4
180°	600.2	600.2	600.2	600.2	600.2

(END OF REPORT)