

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: P1008807

Luminaire Tested: S122DIP-B290D1080UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1008807
REPORT IS A COMBINATION OF REPORTS P983877 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIP-B290D1080UB50-4F0-XX-W2A-F4
Description: Define 2 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

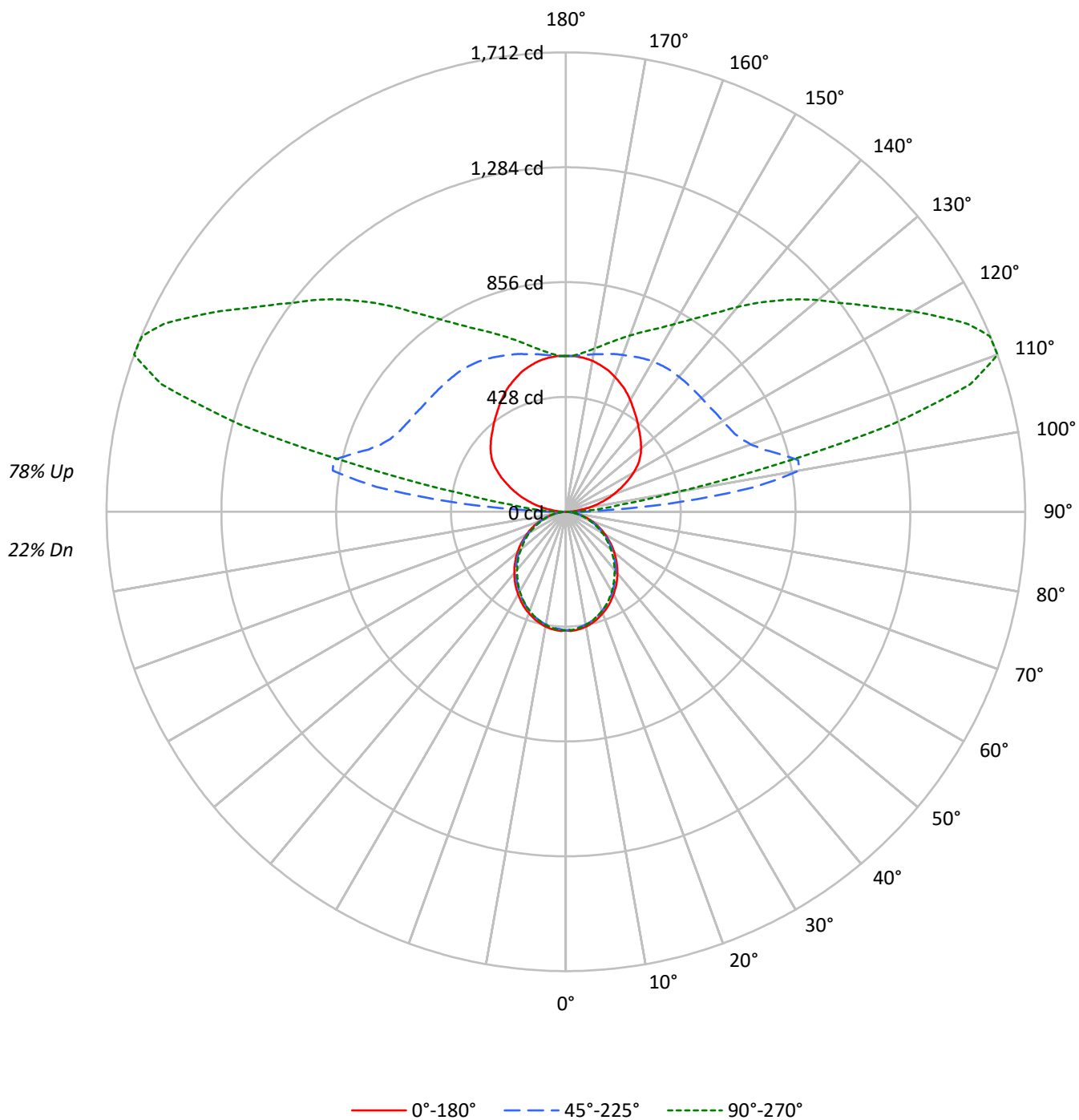
Lumens per Lamp: N/A
Luminaire Lumens: 5175.6 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7000	7000	7000
5°	7011	6672	6625
10°	6953	6368	6242
15°	6852	6062	5838
20°	6714	5728	5457
25°	6578	5380	5075
30°	6405	5054	4676
35°	6243	4708	4283
40°	6041	4368	3911
45°	5840	4030	3548
50°	5622	3686	3170
55°	5393	3318	2812
60°	5134	2922	2440
65°	4852	2517	2049
70°	4491	2074	1654
75°	3994	1600	1279
80°	3393	1086	822
85°	2458	506	350

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5840 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.6	0.8
10°-20°	117.1	2.3
20°-30°	172.1	3.3
30°-40°	199.9	3.9
40°-50°	199.6	3.9
50°-60°	174.1	3.4
60°-70°	128.7	2.5
70°-80°	72.8	1.4
80°-90°	22.9	0.4
90°-100°	235.3	4.5
100°-110°	795.5	15.4
110°-120°	836.1	16.2
120°-130°	687.6	13.3
130°-140°	552.5	10.7
140°-150°	417.4	8.1
150°-160°	293.4	5.7
160°-170°	172.8	3.3
170°-180°	56.2	1.1
0°-30°	330.8	6.4
0°-40°	530.7	10.3
0°-60°	904.3	17.5
0°-90°	1128.7	21.8
90°-120°	1866.9	36.1
90°-150°	3524.5	68.1
90°-180°	4047.0	78.2
0°-180°	5175.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	442	442	442	442	442	
5°	442	440	436	439	438	42
15°	421	418	413	415	412	119
25°	381	378	370	371	370	175
35°	329	324	318	315	313	205
45°	267	264	258	253	252	206
55°	202	200	195	190	188	181
65°	136	134	130	126	124	135
75°	71	71	68	66	67	76
85°	17	17	17	15	15	19
90°	1	15	38	36	37	4
95°	39	96	438	165	127	40
105°	136	205	827	1478	1258	145
115°	240	303	692	1428	1655	238
125°	335	396	665	1157	1343	298
135°	393	469	658	972	1113	304
145°	449	516	654	812	888	282
155°	510	551	635	718	747	235
165°	556	573	608	645	655	157
175°	579	580	585	592	590	55
180°	580	580	580	580	580	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	442.2	442.2	442.2	442.2	442.2
2.5°	444.7	442.6	437.9	442.2	441.3
5°	442.2	440.5	435.8	439.2	438.4
7.5°	439.2	436.7	432.0	435.4	434.5
10°	434.5	431.6	426.5	429.9	428.6
12.5°	428.2	425.6	420.5	422.6	421.8
15°	420.9	418.4	412.9	414.6	412.4
17.5°	412.0	409.5	403.9	406.0	403.9
20°	402.2	399.7	393.7	395.0	393.3
22.5°	392.4	388.6	383.1	383.1	382.2
25°	381.0	377.6	370.3	371.2	370.3
27.5°	368.2	365.2	359.7	358.4	356.3
30°	355.5	352.1	345.7	344.4	342.7
32.5°	341.8	339.3	332.5	329.9	328.2
35°	328.7	324.4	317.6	315.1	312.9
37.5°	313.8	310.0	303.2	300.2	298.1
40°	298.5	295.1	288.3	284.4	282.7
42.5°	283.6	280.2	273.4	269.1	266.6
45°	267.4	264.5	258.1	253.4	251.7
47.5°	251.7	248.7	241.9	237.3	234.7
50°	235.1	233.0	227.0	221.1	219.0
52.5°	219.0	216.0	210.5	205.8	202.8
55°	202.4	199.8	194.7	189.6	187.5
57.5°	185.8	183.7	178.2	173.0	171.3
60°	169.2	167.5	161.6	156.9	155.6
62.5°	153.1	150.1	145.8	141.6	139.9
65°	136.5	133.9	129.7	125.9	123.7
67.5°	119.5	117.4	113.5	110.5	108.8
70°	103.7	102.0	98.2	95.2	93.5
72.5°	87.6	85.9	83.8	80.8	79.5
75°	71.4	70.6	68.5	65.9	66.8
77.5°	57.0	55.3	54.4	53.1	51.9
80°	42.5	42.1	41.2	40.0	39.1
82.5°	28.9	28.9	28.5	26.8	26.8
85°	17.4	17.0	16.6	15.3	14.9
87.5°	7.7	6.8	6.0	4.7	4.3
90°	1.1	15.0	38.0	36.2	36.8
92.5°	16.7	53.0	171.9	79.2	68.1
95°	39.1	96.0	437.6	165.2	127.3
97.5°	58.0	126.7	713.3	331.5	213.2
100°	86.0	155.2	881.8	660.2	399.6
102.5°	111.6	180.8	887.4	1116.2	779.1
105°	136.2	205.4	827.1	1478.5	1258.0
107.5°	163.0	230.0	771.3	1609.6	1580.6
110°	189.8	255.0	733.4	1588.4	1712.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	214.3	279.0	708.8	1516.4	1710.1
115°	240.0	303.0	692.1	1428.2	1655.4
117.5°	266.8	327.0	683.1	1344.0	1572.8
120°	291.3	350.5	675.3	1268.6	1493.5
122.5°	314.8	374.5	670.9	1210.1	1410.9
125°	334.9	396.2	665.3	1157.0	1342.8
127.5°	351.6	416.9	661.9	1111.8	1279.2
130°	366.1	435.4	659.7	1066.1	1226.8
132.5°	379.5	453.2	658.6	1018.6	1172.1
135°	392.9	468.8	657.5	972.2	1112.9
137.5°	405.2	482.2	657.5	925.4	1056.0
140°	419.7	494.5	656.4	884.0	996.8
142.5°	434.2	504.6	656.4	844.4	937.7
145°	448.7	515.7	654.1	812.1	888.5
147.5°	464.4	524.6	650.8	783.6	845.0
150°	480.0	533.6	647.4	759.0	807.0
152.5°	495.6	542.5	641.8	738.4	774.7
155°	510.1	550.8	635.1	718.3	746.8
157.5°	522.4	557.6	628.4	699.3	722.2
160°	534.7	564.2	621.8	680.3	698.8
162.5°	547.0	569.3	616.2	662.5	676.4
165°	555.9	572.6	608.4	645.2	655.2
167.5°	563.7	576.0	601.7	629.6	635.1
170°	571.5	577.6	596.1	615.0	617.3
172.5°	576.0	579.4	589.4	602.2	602.8
175°	579.3	579.9	584.9	592.2	590.5
177.5°	581.6	580.5	580.5	584.9	581.6
180°	580.5	580.5	580.5	580.5	580.5

(END OF REPORT)