

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: P1008816

Luminaire Tested: S122DIP-B290D330UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1008816
REPORT IS A COMBINATION OF REPORTS P983886 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIP-B290D330UB27-4F0-XX-W2A-F4
Description: Define 2 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

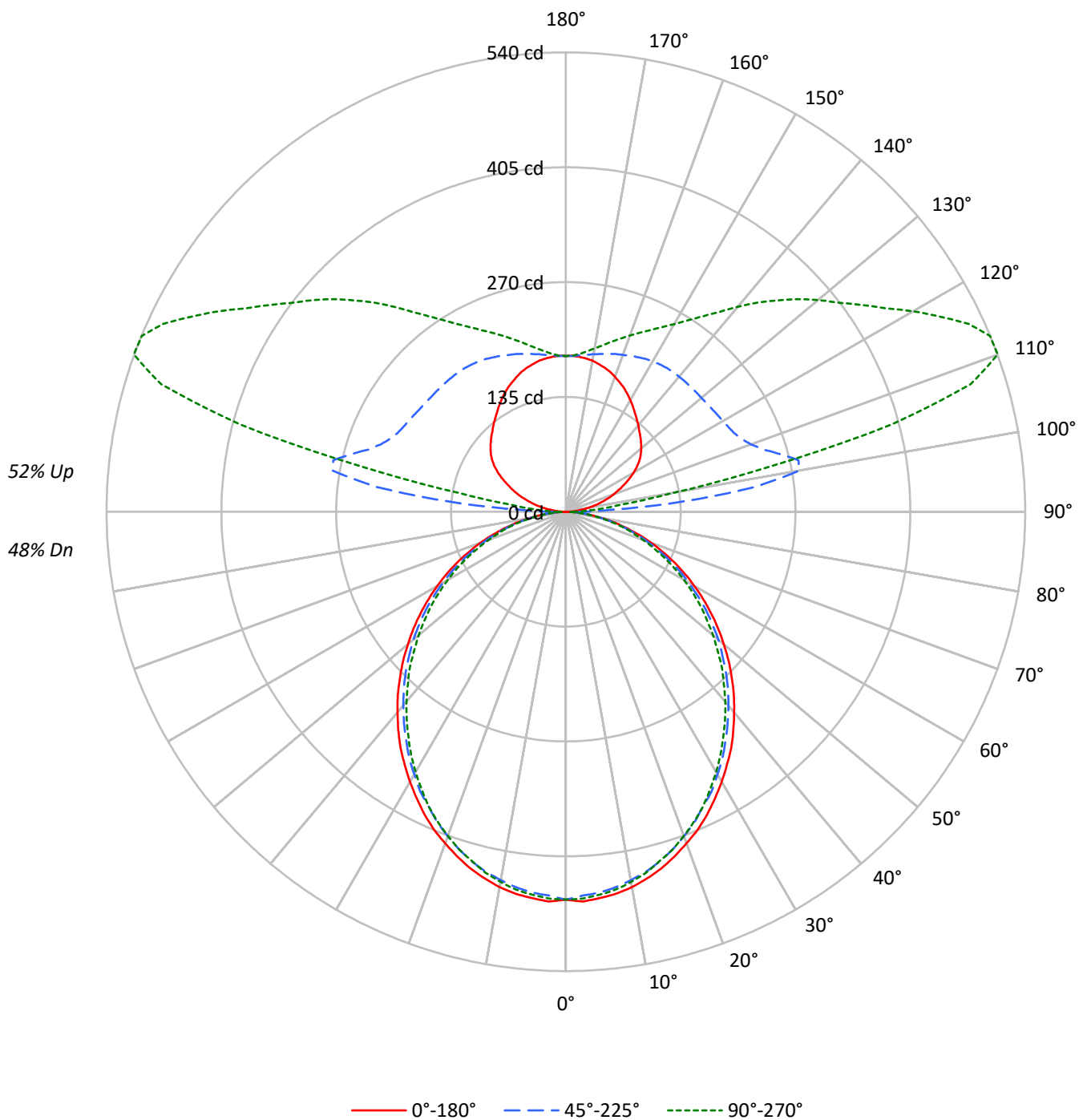
Lumens per Lamp: N/A
Luminaire Lumens: 2438.5 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 22.3
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	98	98	98	98	82	82	82	67	67	67	54	54	54
1	97	93	89	86	89	86	82	79	72	69	67	59	58	56	48	47	46
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	42	40	38
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	37	35	33
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28
5	68	56	48	42	62	52	45	40	44	39	34	37	33	29	30	27	25
6	62	50	42	37	57	47	40	34	40	34	30	33	29	26	27	24	22
7	58	46	38	32	53	42	35	30	36	30	26	30	26	23	25	22	19
8	54	41	34	28	49	38	31	27	33	27	23	28	23	20	23	20	17
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	16
10	47	35	27	23	43	32	26	21	28	23	19	24	19	17	20	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7217	7217	7217
5°	7228	6880	6831
10°	7171	6566	6435
15°	7065	6250	6021
20°	6923	5907	5626
25°	6781	5548	5234
30°	6604	5210	4822
35°	6436	4855	4417
40°	6230	4503	4033
45°	6023	4155	3658
50°	5797	3801	3269
55°	5561	3422	2899
60°	5295	3012	2517
65°	5002	2595	2113
70°	4634	2139	1707
75°	4123	1649	1317
80°	3497	1120	847
85°	2543	521	360

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6023 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.9	1.8
10°-20°	120.7	5.0
20°-30°	177.4	7.3
30°-40°	206.1	8.5
40°-50°	205.8	8.4
50°-60°	179.5	7.4
60°-70°	132.7	5.4
70°-80°	75.1	3.1
80°-90°	21.0	0.9
90°-100°	74.3	3.0
100°-110°	251.1	10.3
110°-120°	263.9	10.8
120°-130°	217.0	8.9
130°-140°	174.4	7.2
140°-150°	131.7	5.4
150°-160°	92.6	3.8
160°-170°	54.5	2.2
170°-180°	17.7	0.7
0°-30°	341.1	14.0
0°-40°	547.2	22.4
0°-60°	932.5	38.2
0°-90°	1161.2	47.6
90°-120°	589.2	24.2
90°-150°	1112.4	45.6
90°-180°	1277.0	52.4
0°-180°	2438.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	456	456	456	456	456	
5°	456	454	449	453	452	43
15°	434	431	426	427	425	122
25°	393	389	382	383	382	181
35°	339	334	328	325	323	212
45°	276	273	266	261	260	213
55°	209	206	201	196	193	187
65°	141	138	134	130	128	139
75°	74	73	71	68	69	79
85°	18	18	17	16	15	20
90°	0	5	12	11	12	2
95°	12	30	138	52	40	13
105°	43	65	261	467	397	46
115°	76	96	218	451	522	75
125°	106	125	210	365	424	94
135°	124	148	208	307	351	96
145°	142	163	206	256	280	89
155°	161	174	200	227	236	74
165°	176	181	192	204	207	49
175°	183	183	185	187	186	17
180°	183	183	183	183	183	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	455.9	455.9	455.9	455.9	455.9
2.5°	458.6	456.4	451.6	455.9	455.1
5°	455.9	454.2	449.4	452.9	452.0
7.5°	452.9	450.2	445.4	448.9	448.1
10°	448.1	445.0	439.7	443.2	441.9
12.5°	441.5	438.8	433.6	435.8	434.9
15°	434.0	431.4	425.7	427.4	425.3
17.5°	424.8	422.2	416.5	418.7	416.5
20°	414.7	412.1	406.0	407.3	405.5
22.5°	404.7	400.7	395.0	395.0	394.1
25°	392.8	389.3	381.9	382.7	381.9
27.5°	379.7	376.6	370.9	369.6	367.4
30°	366.5	363.0	356.4	355.1	353.4
32.5°	352.5	349.9	342.8	340.2	338.5
35°	338.9	334.5	327.5	324.9	322.7
37.5°	323.5	319.6	312.6	309.5	307.3
40°	307.8	304.3	297.2	293.3	291.5
42.5°	292.4	288.9	281.9	277.5	274.9
45°	275.8	272.7	266.1	261.3	259.5
47.5°	259.5	256.5	249.5	244.6	242.0
50°	242.4	240.2	234.1	228.0	225.8
52.5°	225.8	222.7	217.0	212.2	209.1
55°	208.7	206.1	200.8	195.5	193.3
57.5°	191.6	189.4	183.7	178.4	176.7
60°	174.5	172.7	166.6	161.8	160.5
62.5°	157.8	154.8	150.4	146.0	144.2
65°	140.7	138.1	133.7	129.8	127.6
67.5°	123.2	121.0	117.1	114.0	112.2
70°	107.0	105.2	101.3	98.2	96.5
72.5°	90.3	88.6	86.4	83.3	82.0
75°	73.7	72.8	70.6	68.0	68.8
77.5°	58.7	57.0	56.1	54.8	53.5
80°	43.8	43.4	42.5	41.2	40.3
82.5°	29.8	29.8	29.4	27.6	27.6
85°	18.0	17.5	17.1	15.8	15.3
87.5°	7.9	7.0	6.1	4.8	4.4
90°	0.4	4.8	12.0	11.4	11.6
92.5°	5.3	16.8	54.3	25.0	21.5
95°	12.3	30.3	138.1	52.2	40.2
97.5°	18.3	40.0	225.1	104.6	67.3
100°	27.1	49.0	278.3	208.4	126.1
102.5°	35.2	57.0	280.1	352.3	245.9
105°	43.0	64.8	261.1	466.6	397.1
107.5°	51.4	72.6	243.4	508.0	498.9
110°	59.9	80.5	231.5	501.4	540.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	67.6	88.1	223.7	478.6	539.7
115°	75.7	95.6	218.4	450.8	522.5
117.5°	84.2	103.2	215.6	424.2	496.4
120°	92.0	110.6	213.1	400.4	471.4
122.5°	99.4	118.2	211.7	381.9	445.3
125°	105.7	125.0	210.0	365.2	423.8
127.5°	111.0	131.6	208.9	350.9	403.7
130°	115.6	137.4	208.2	336.5	387.2
132.5°	119.8	143.0	207.9	321.4	369.9
135°	124.0	148.0	207.5	306.8	351.3
137.5°	127.9	152.2	207.5	292.1	333.3
140°	132.5	156.1	207.2	279.0	314.6
142.5°	137.0	159.2	207.2	266.5	295.9
145°	141.6	162.8	206.5	256.3	280.4
147.5°	146.6	165.6	205.4	247.3	266.7
150°	151.5	168.4	204.3	239.6	254.7
152.5°	156.4	171.2	202.6	233.0	244.5
155°	161.0	173.8	200.5	226.8	235.7
157.5°	164.9	176.0	198.4	220.7	227.9
160°	168.8	178.1	196.2	214.8	220.5
162.5°	172.6	179.7	194.5	209.1	213.5
165°	175.5	180.8	192.0	203.6	206.8
167.5°	177.9	181.8	189.9	198.7	200.5
170°	180.4	182.3	188.1	194.2	194.8
172.5°	181.8	182.8	186.0	190.0	190.2
175°	182.8	183.0	184.6	186.9	186.4
177.5°	183.6	183.2	183.2	184.6	183.6
180°	183.2	183.2	183.2	183.2	183.2

(END OF REPORT)