

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: P987461

Luminaire Tested: S122DR-B290DB2750-4F0-XX-W2A-F_2700K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987461
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DR-B290DB2750-4F0-XX-W2A-F_2700K
Description: Define 2 Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

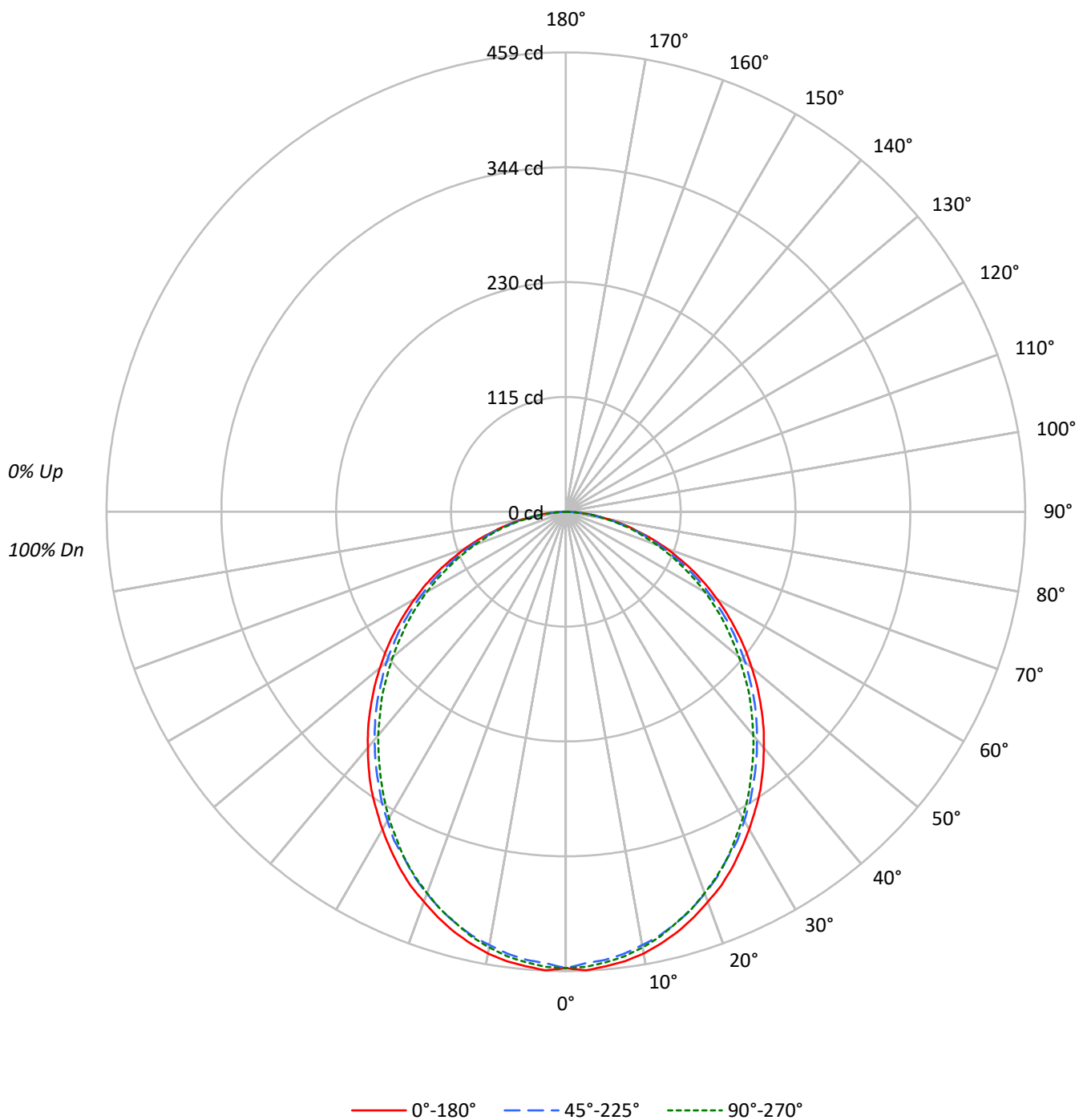
Lumens per Lamp: N/A
Luminaire Lumens: 1160.0 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 13
Input Voltage (V): 120
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				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84			
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71			
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60			
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51			
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45			
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39			
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35			
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28			
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	32	27	26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7217	7217	7217
5°	7244	7141	7182
10°	7203	7068	7103
15°	7112	6976	6970
20°	6986	6839	6831
25°	6861	6670	6670
30°	6699	6514	6459
35°	6549	6329	6236
40°	6360	6141	6023
45°	6174	5957	5809
50°	5969	5765	5561
55°	5760	5542	5335
60°	5524	5274	5081
65°	5270	5008	4779
70°	4952	4688	4466
75°	4507	4318	4208
80°	3993	3874	3674
85°	3269	3106	2779

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6174 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.9	3.7
10°-20°	120.7	10.4
20°-30°	177.4	15.3
30°-40°	206.1	17.8
40°-50°	205.8	17.7
50°-60°	179.5	15.5
60°-70°	132.7	11.4
70°-80°	75.1	6.5
80°-90°	19.8	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	341.1	29.4
0°-40°	547.2	47.2
0°-60°	932.5	80.4
0°-90°	1160.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1160.0	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	21
90°	0	0	0	0	0	

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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°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)