

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: P1037167

Luminaire Tested: S122RDS-B290DB40-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037167
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDS-B290DB40-4F0-XX-W2A-F
Description: Define 2 Regressed Direct Surface with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

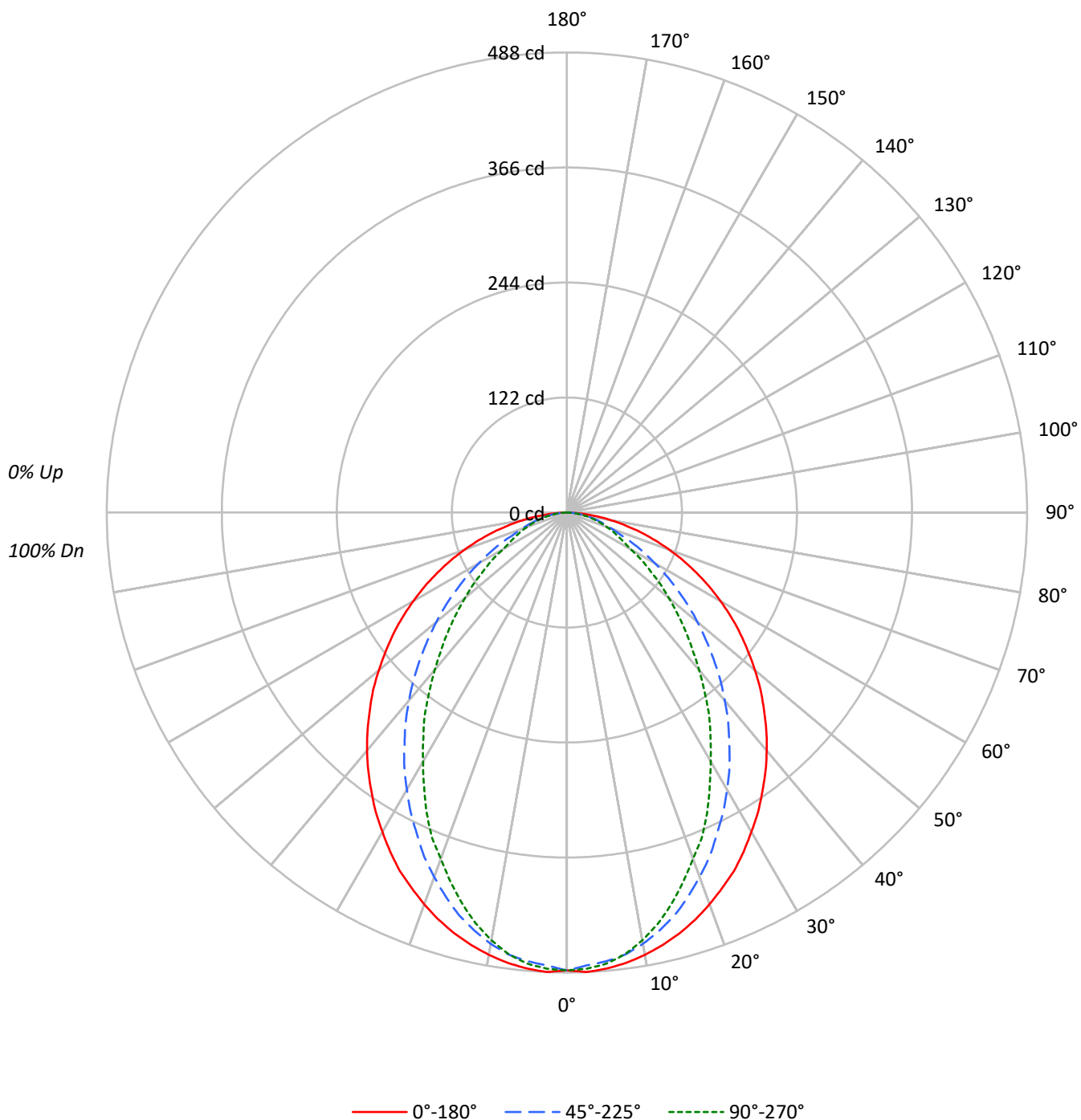
Lumens per Lamp: N/A
Luminaire Lumens: 999.0 lumens
Efficiency: N/A
Efficacy: 76.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 13
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

TEST NUMBER: P1037167

CATALOG NUMBER: S122RDS-B290DB40-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1037167

CATALOG NUMBER: S122RDS-B290DB40-4F0-XX-W2A-F

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	98	107	103	100	97	99	96	94		95	93	91		92
2	101	94	87	82	98	92	86	81	88	83	79		85	81	78		82
3	93	83	76	70	90	82	75	69	79	73	68		76	71	67		74
4	86	75	66	60	83	73	66	60	71	64	59		69	63	58		66
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		60
6	74	61	53	47	72	60	52	46	58	51	46		57	50	46		55
7	68	56	47	42	67	55	47	42	53	46	41		52	46	41		51
8	64	51	43	38	62	51	43	37	49	42	37		48	42	37		47
9	60	47	39	34	59	47	39	34	46	39	34		44	38	34		44
10	56	44	36	31	55	43	36	31	42	36	31		41	35	31		41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7688	7688	7688
5°	7718	7592	7635
10°	7659	7468	7405
15°	7571	7247	7039
20°	7449	6932	6583
25°	7325	6572	6143
30°	7150	6204	5577
35°	6982	5801	5080
40°	6813	5387	4505
45°	6613	4920	3985
50°	6408	4450	3475
55°	6198	3944	2983
60°	5955	3410	2476
65°	5682	2865	2255
70°	5350	2360	2073
75°	4948	2153	1939
80°	4366	1923	1759
85°	3433	1526	1526

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 6613 cd/sqm

TEST NUMBER: P1037167

CATALOG NUMBER: S122RDS-B290DB40-4FO-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.5	4.6
10°-20°	125.0	12.5
20°-30°	175.5	17.6
30°-40°	191.3	19.1
40°-50°	175.8	17.6
50°-60°	138.0	13.8
60°-70°	89.9	9.0
70°-80°	46.3	4.6
80°-90°	11.8	1.2
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°	346.0	34.6
0°-40°	537.2	53.8
0°-60°	851.1	85.2
0°-90°	999.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	999.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	486	486	486	486	486	
5°	486	484	478	482	480	46
15°	462	457	442	434	430	130
25°	419	405	376	358	352	193
35°	361	339	300	272	263	226
45°	295	266	220	189	178	228
55°	225	190	143	116	108	201
65°	152	116	76	62	60	150
75°	81	50	35	32	32	86
85°	19	10	8	8	8	23
90°	0	0	0	0	0	

TEST NUMBER: P1037167

CATALOG NUMBER: S122RDS-B290DB40-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	485.7	485.7	485.7	485.7	485.7
2.5°	487.9	485.7	480.9	485.3	484.4
5°	485.7	483.5	477.8	481.8	480.5
7.5°	481.8	479.2	473.0	474.8	472.6
10°	476.5	473.4	464.6	463.3	460.7
12.5°	469.9	466.0	454.1	451.5	446.6
15°	462.0	457.2	442.2	433.9	429.5
17.5°	452.8	445.7	427.3	417.6	410.6
20°	442.2	433.4	411.5	400.5	390.8
22.5°	430.8	420.7	395.2	380.2	373.7
25°	419.4	405.3	376.3	358.3	351.7
27.5°	405.7	390.8	358.7	338.0	327.9
30°	391.2	374.5	339.4	316.9	305.1
32.5°	377.2	356.9	320.9	294.5	283.5
35°	361.3	338.9	300.2	272.5	262.9
37.5°	346.0	321.8	280.9	250.6	239.6
40°	329.7	303.3	260.7	229.5	218.0
42.5°	313.0	284.9	240.5	207.9	196.9
45°	295.4	266.0	219.8	188.6	178.0
47.5°	278.7	247.5	200.0	168.8	159.1
50°	260.2	229.0	180.7	150.3	141.1
52.5°	242.2	209.2	162.2	133.2	124.8
55°	224.6	190.3	142.9	116.5	108.1
57.5°	206.6	171.4	125.7	101.1	94.1
60°	188.1	153.0	107.7	85.3	78.2
62.5°	170.1	135.0	92.3	71.2	67.7
65°	151.7	116.1	76.5	61.5	60.2
67.5°	134.1	98.5	61.5	54.1	52.8
70°	115.6	81.3	51.0	46.6	44.8
72.5°	98.0	65.5	42.6	39.1	38.2
75°	80.9	50.1	35.2	32.1	31.7
77.5°	63.7	35.6	27.7	25.9	25.1
80°	47.9	25.5	21.1	19.3	19.3
82.5°	33.4	17.1	14.5	13.6	13.6
85°	18.9	9.7	8.4	8.4	8.4
87.5°	7.0	3.5	3.5	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)