

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: P1037169

Luminaire Tested: S122RDS-B290DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037169
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-B290DB50-4F0-XX-W2A-F
Description: Define 2 Regressed Direct Surface with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

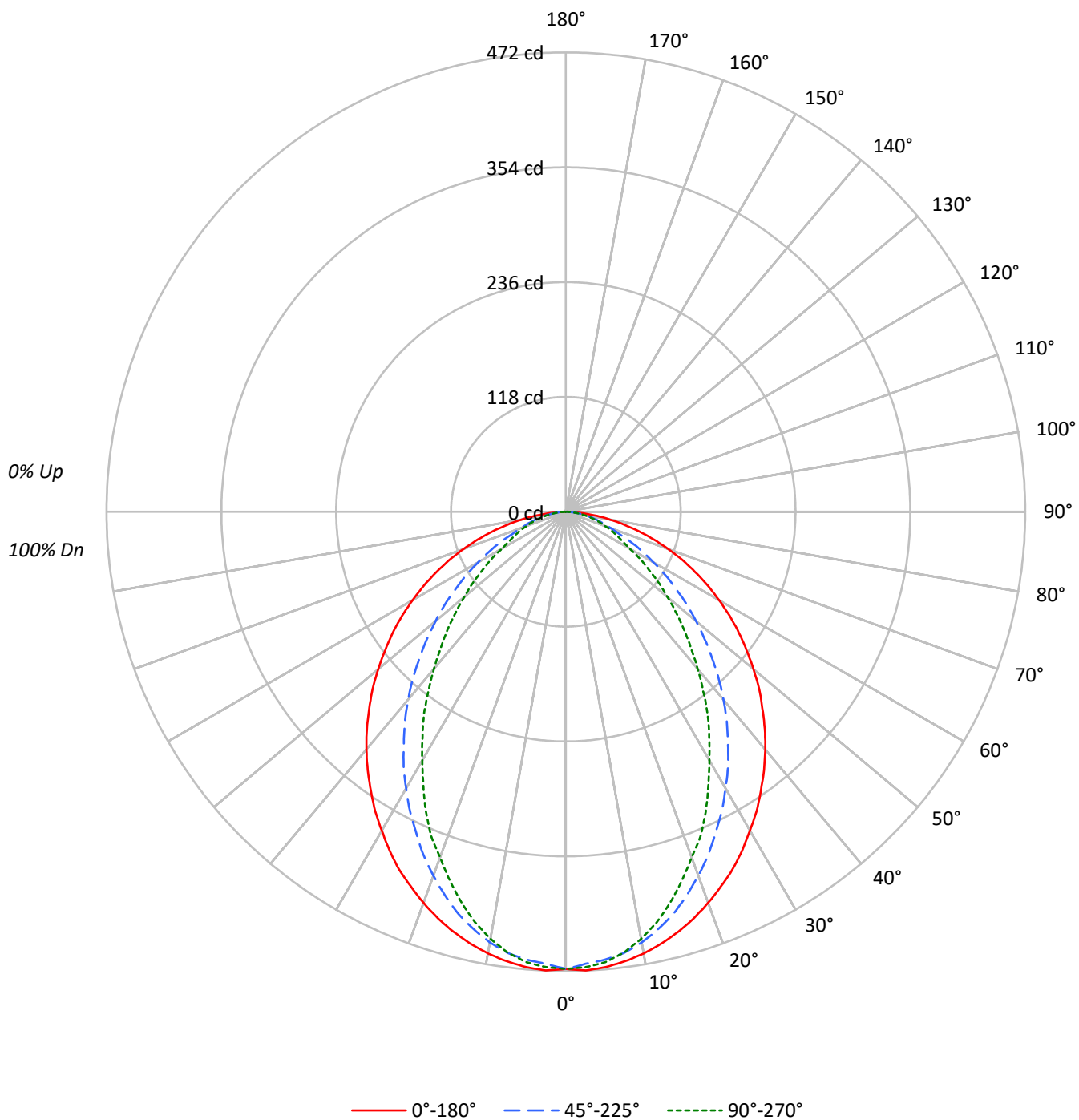
Lumens per Lamp: N/A
Luminaire Lumens: 966.0 lumens
Efficiency: N/A
Efficacy: 74.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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: P1037169

CATALOG NUMBER: S122RDS-B290DB50-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1037169

CATALOG NUMBER: S122RDS-B290DB50-4F0-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°	7435	7435	7435
5°	7463	7341	7382
10°	7407	7222	7161
15°	7320	7007	6806
20°	7203	6703	6366
25°	7082	6356	5940
30°	6915	5999	5392
35°	6752	5610	4912
40°	6588	5209	4356
45°	6393	4757	3855
50°	6196	4302	3359
55°	5994	3811	2887
60°	5759	3296	2397
65°	5491	2772	2180
70°	5174	2282	2009
75°	4783	2079	1871
80°	4221	1860	1705
85°	3324	1471	1471

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6393 cd/sqm

TEST NUMBER: P1037169

CATALOG NUMBER: S122RDS-B290DB50-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.0	4.6
10°-20°	120.8	12.5
20°-30°	169.7	17.6
30°-40°	184.9	19.1
40°-50°	170.0	17.6
50°-60°	133.5	13.8
60°-70°	86.9	9.0
70°-80°	44.7	4.6
80°-90°	11.4	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°	334.5	34.6
0°-40°	519.5	53.8
0°-60°	823.0	85.2
0°-90°	966.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	966.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	470	470	470	470	470	
5°	470	468	462	466	465	45
15°	447	442	428	420	415	126
25°	406	392	364	346	340	186
35°	349	328	290	264	254	219
45°	286	257	212	182	172	221
55°	217	184	138	113	105	194
65°	147	112	74	60	58	145
75°	78	48	34	31	31	83
85°	18	9	8	8	8	22
90°	0	0	0	0	0	

TEST NUMBER: P1037169

CATALOG NUMBER: S122RDS-B290DB50-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	469.7	469.7	469.7	469.7	469.7
2.5°	471.8	469.7	465.0	469.3	468.4
5°	469.7	467.6	462.0	465.9	464.6
7.5°	465.9	463.3	457.4	459.1	456.9
10°	460.8	457.8	449.3	448.0	445.5
12.5°	454.4	450.6	439.1	436.5	431.9
15°	446.7	442.1	427.6	419.5	415.3
17.5°	437.8	431.0	413.2	403.8	397.0
20°	427.6	419.1	397.9	387.2	377.9
22.5°	416.6	406.8	382.1	367.7	361.3
25°	405.5	391.9	363.9	346.4	340.1
27.5°	392.3	377.9	346.9	326.9	317.1
30°	378.3	362.2	328.2	306.5	295.0
32.5°	364.7	345.2	310.3	284.8	274.2
35°	349.4	327.7	290.3	263.5	254.2
37.5°	334.5	311.2	271.6	242.3	231.7
40°	318.8	293.3	252.1	221.9	210.8
42.5°	302.6	275.4	232.5	201.1	190.4
45°	285.6	257.2	212.5	182.4	172.2
47.5°	269.5	239.3	193.4	163.2	153.9
50°	251.6	221.5	174.7	145.4	136.4
52.5°	234.2	202.3	156.9	128.8	120.7
55°	217.2	184.1	138.1	112.6	104.6
57.5°	199.8	165.8	121.6	97.8	91.0
60°	181.9	147.9	104.1	82.5	75.7
62.5°	164.5	130.5	89.3	68.9	65.5
65°	146.6	112.2	74.0	59.5	58.2
67.5°	129.6	95.2	59.5	52.3	51.0
70°	111.8	78.6	49.3	45.1	43.4
72.5°	94.8	63.3	41.2	37.8	37.0
75°	78.2	48.5	34.0	31.0	30.6
77.5°	61.6	34.4	26.8	25.1	24.2
80°	46.3	24.7	20.4	18.7	18.7
82.5°	32.3	16.6	14.0	13.2	13.2
85°	18.3	9.4	8.1	8.1	8.1
87.5°	6.8	3.4	3.4	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)