

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: P1057893

Luminaire Tested: S122RDR-S290D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057893
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D840-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

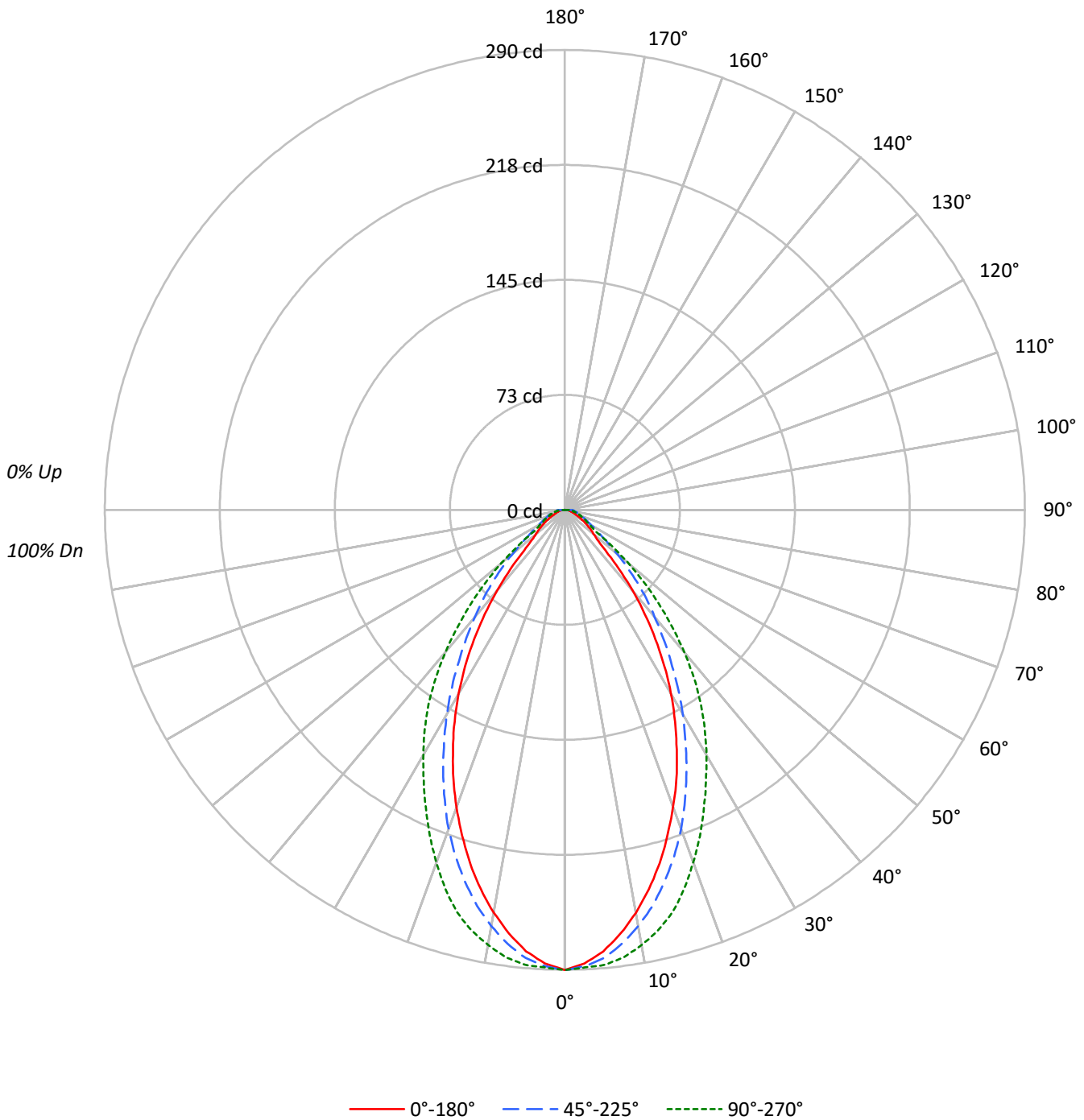
Lumens per Lamp: N/A
Luminaire Lumens: 352.0 lumens
Efficiency: N/A
Efficacy: 28.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
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									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	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													100															
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89													89															
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80													80															
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72													72															
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65													65															
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59													59															
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54													54															
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50													50															
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46													46															
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42													42															
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39													39															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5355	5355	5355
5°	5175	5255	5335
10°	4832	4993	5220
15°	4407	4638	5017
20°	3919	4208	4648
25°	3398	3695	4223
30°	2849	3170	3803
35°	2244	2622	3370
40°	1599	2120	2816
45°	945	1675	2184
50°	680	1214	1484
55°	569	875	750
60°	461	701	635
65°	375	620	585
70°	324	604	556
75°	307	613	556
80°	319	733	595
85°	466	1186	720

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2184 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.6	7.6
10°-20°	68.4	19.4
20°-30°	84.4	24.0
30°-40°	75.0	21.3
40°-50°	47.9	13.6
50°-60°	23.0	6.5
60°-70°	13.5	3.8
70°-80°	8.6	2.5
80°-90°	4.6	1.3
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°	179.4	51.0
0°-40°	254.4	72.3
0°-60°	325.3	92.4
0°-90°	352.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	352.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	290	290	290	290	290	
5°	279	285	284	286	288	26
15°	231	236	243	254	263	64
25°	167	173	182	194	207	76
35°	100	107	116	134	150	62
45°	36	47	64	75	84	30
55°	18	23	27	26	23	16
65°	9	16	14	13	13	9
75°	4	10	9	8	8	5
85°	2	5	6	5	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	290.2	290.2	290.2	290.2	290.2
2.5°	286.3	291.1	288.0	288.0	288.9
5°	279.4	284.6	283.7	285.5	288.0
7.5°	269.5	275.1	276.0	280.7	284.6
10°	257.9	263.9	266.5	273.4	278.6
12.5°	244.9	251.0	255.7	264.3	271.7
15°	230.7	236.3	242.8	254.0	262.6
17.5°	215.2	222.5	229.0	240.6	250.5
20°	199.6	206.5	214.3	225.5	236.7
22.5°	183.7	190.2	197.9	209.6	222.5
25°	166.9	173.3	181.5	194.5	207.4
27.5°	150.5	157.0	164.7	178.9	192.7
30°	133.7	140.1	148.8	163.4	178.5
32.5°	116.9	123.8	132.4	148.3	164.3
35°	99.6	107.4	116.4	134.1	149.6
37.5°	82.8	90.6	101.8	119.0	133.7
40°	66.4	75.5	88.0	103.5	116.9
42.5°	50.5	60.4	75.9	88.4	100.0
45°	36.2	47.0	64.2	74.6	83.7
47.5°	27.6	35.4	53.0	61.2	67.7
50°	23.7	28.5	42.3	48.3	51.7
52.5°	20.7	25.0	33.6	36.7	36.7
55°	17.7	22.9	27.2	26.3	23.3
57.5°	15.1	20.7	22.4	19.0	19.8
60°	12.5	19.0	19.0	16.8	17.2
62.5°	10.3	17.7	16.4	14.7	15.1
65°	8.6	15.5	14.2	12.9	13.4
67.5°	6.9	13.8	12.5	11.6	11.6
70°	6.0	12.5	11.2	10.3	10.3
72.5°	5.2	10.8	9.9	9.1	9.1
75°	4.3	9.5	8.6	8.2	7.8
77.5°	3.9	8.2	7.8	6.9	6.5
80°	3.0	6.9	6.9	6.5	5.6
82.5°	2.6	6.0	6.0	5.6	4.7
85°	2.2	5.2	5.6	4.7	3.4
87.5°	1.7	4.7	4.7	3.9	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)