

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: P1057896

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057896
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D840-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

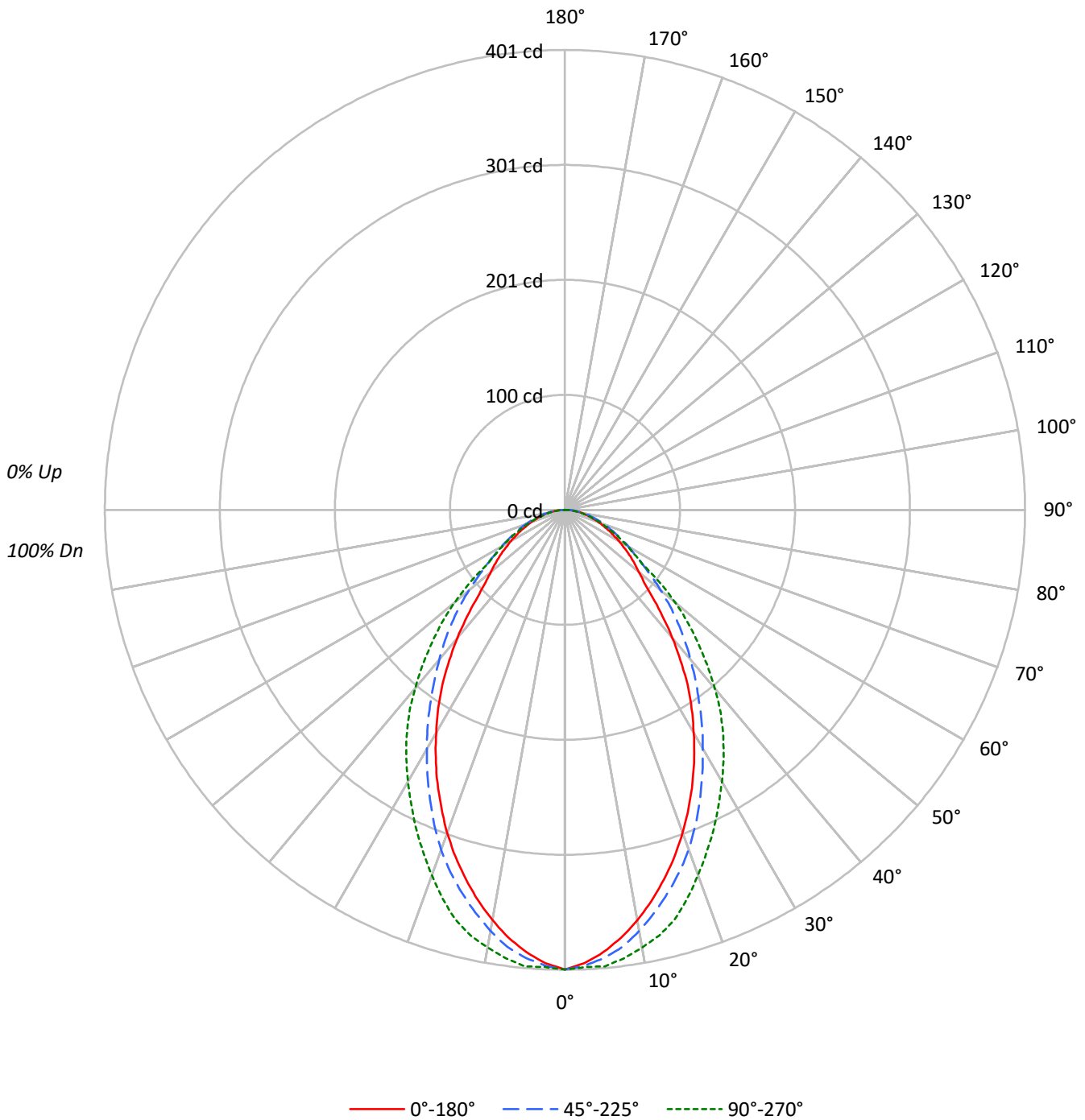
Lumens per Lamp: N/A
Luminaire Lumens: 653.4 lumens
Efficiency: N/A
Efficacy: 52.3 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	
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	110	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67				
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59				
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52				
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47				
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43				
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36				
10	59	47	40	35	58	46	39	35	46	39	35	45	39	35	44	38	34	33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7396	7396	7396
5°	7168	7263	7400
10°	6807	6985	7259
15°	6371	6610	7063
20°	5889	6193	6659
25°	5353	5668	6246
30°	4783	5124	5830
35°	4194	4591	5418
40°	3510	4100	4890
45°	2811	3633	4274
50°	2411	3129	3588
55°	2204	2661	2648
60°	2004	2355	2307
65°	1825	2109	2013
70°	1672	1931	1791
75°	1568	1782	1568
80°	1466	1647	1371
85°	1461	1736	1186

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4274 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.0	5.7
10°-20°	97.9	15.0
20°-30°	129.2	19.8
30°-40°	130.1	19.9
40°-50°	105.9	16.2
50°-60°	72.2	11.0
60°-70°	46.9	7.2
70°-80°	25.8	3.9
80°-90°	8.4	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°	264.1	40.4
0°-40°	394.2	60.3
0°-60°	572.3	87.6
0°-90°	653.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	653.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	401	401	401	401	401	
5°	387	394	392	396	400	36
15°	334	342	346	360	370	93
25°	263	272	278	291	307	121
35°	186	196	204	222	240	116
45°	108	121	139	151	164	85
55°	68	75	83	83	82	61
65°	42	50	48	46	46	42
75°	22	27	25	22	22	23
85°	7	9	8	6	6	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	400.8	400.8	400.8	400.8	400.8
2.5°	395.6	402.1	397.7	398.2	399.0
5°	387.0	394.3	392.1	395.6	399.5
7.5°	376.2	383.5	384.4	389.6	394.3
10°	363.3	371.5	372.8	380.5	387.4
12.5°	349.1	358.1	359.8	371.0	380.1
15°	333.5	342.2	346.0	360.3	369.7
17.5°	317.2	325.4	331.4	344.3	355.1
20°	299.9	307.7	315.4	327.1	339.1
22.5°	281.4	290.0	297.3	309.0	322.8
25°	262.9	271.5	278.4	290.9	306.8
27.5°	243.9	252.5	259.4	272.8	290.0
30°	224.5	233.6	240.5	255.5	273.6
32.5°	205.6	214.6	222.4	238.3	257.3
35°	186.2	195.6	203.8	221.5	240.5
37.5°	165.5	176.3	186.6	204.3	222.8
40°	145.7	157.7	170.2	186.6	203.0
42.5°	125.8	139.2	154.7	168.5	183.6
45°	107.7	121.1	139.2	151.3	163.8
47.5°	93.5	104.7	124.1	134.0	145.2
50°	84.0	91.8	109.0	116.8	125.0
52.5°	76.3	82.7	94.8	100.0	104.3
55°	68.5	75.4	82.7	83.2	82.3
57.5°	60.8	68.5	72.4	69.4	71.1
60°	54.3	62.1	63.8	60.8	62.5
62.5°	47.4	56.0	56.0	53.0	53.9
65°	41.8	49.6	48.3	45.7	46.1
67.5°	36.2	44.0	41.8	39.2	39.2
70°	31.0	38.4	35.8	33.2	33.2
72.5°	26.3	32.3	30.6	27.6	27.1
75°	22.0	27.1	25.0	22.4	22.0
77.5°	17.7	22.0	20.3	18.1	17.2
80°	13.8	17.7	15.5	13.8	12.9
82.5°	10.3	13.4	11.6	9.9	9.0
85°	6.9	9.0	8.2	6.5	5.6
87.5°	3.4	6.0	5.2	4.3	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)