

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: P1057923

Luminaire Tested: S122RDR-S290D930-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057923
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-S290D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

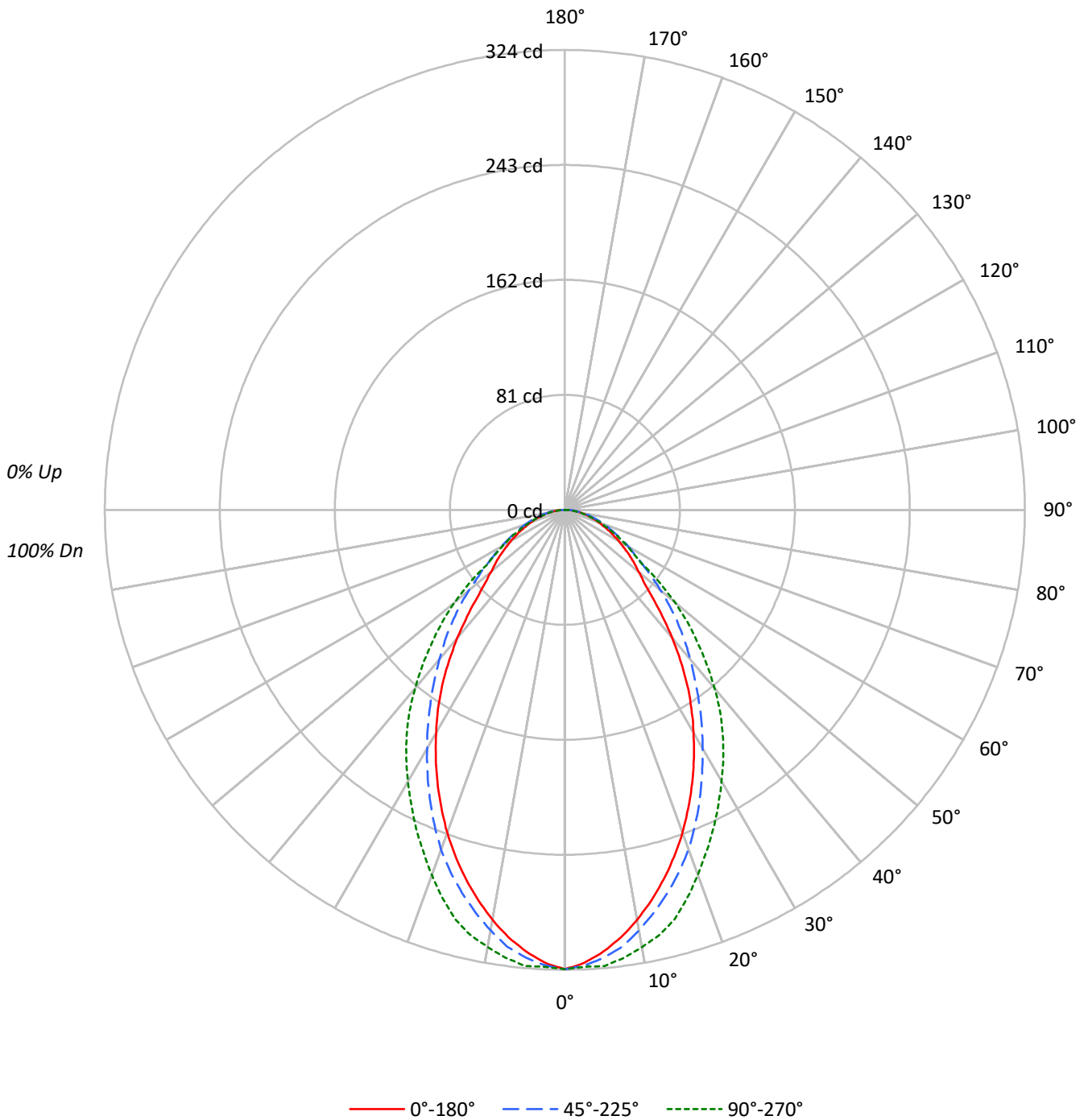
Lumens per Lamp: N/A
Luminaire Lumens: 527.5 lumens
Efficiency: N/A
Efficacy: 42.2 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	99	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	40	35	46	39	35	45	39	35	44	38	34	33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5971	5971	5971
5°	5787	5864	5974
10°	5496	5638	5861
15°	5145	5337	5702
20°	4754	5001	5377
25°	4320	4575	5043
30°	3863	4136	4707
35°	3386	3708	4372
40°	2833	3310	3948
45°	2270	2933	3450
50°	1946	2526	2897
55°	1779	2149	2136
60°	1616	1901	1860
65°	1471	1703	1624
70°	1349	1559	1446
75°	1262	1440	1262
80°	1180	1328	1105
85°	1186	1397	953

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3450 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.9	5.7
10°-20°	79.1	15.0
20°-30°	104.3	19.8
30°-40°	105.0	19.9
40°-50°	85.5	16.2
50°-60°	58.3	11.0
60°-70°	37.8	7.2
70°-80°	20.8	3.9
80°-90°	6.8	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°	213.2	40.4
0°-40°	318.3	60.3
0°-60°	462.0	87.6
0°-90°	527.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	527.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	324	324	324	324	324	
5°	312	318	317	319	322	29
15°	269	276	279	291	298	75
25°	212	219	225	235	248	97
35°	150	158	165	179	194	93
45°	87	98	112	122	132	69
55°	55	61	67	67	66	50
65°	34	40	39	37	37	34
75°	18	22	20	18	18	19
85°	6	7	7	5	4	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	323.6	323.6	323.6	323.6	323.6
2.5°	319.4	324.6	321.1	321.5	322.2
5°	312.4	318.3	316.6	319.4	322.5
7.5°	303.7	309.6	310.3	314.5	318.3
10°	293.3	299.9	300.9	307.2	312.8
12.5°	281.8	289.1	290.5	299.5	306.9
15°	269.3	276.2	279.4	290.8	298.5
17.5°	256.1	262.7	267.5	278.0	286.7
20°	242.1	248.4	254.7	264.1	273.8
22.5°	227.2	234.1	240.1	249.4	260.6
25°	212.2	219.2	224.7	234.8	247.7
27.5°	196.9	203.9	209.4	220.2	234.1
30°	181.3	188.6	194.1	206.3	220.9
32.5°	166.0	173.3	179.5	192.4	207.7
35°	150.3	157.9	164.6	178.8	194.1
37.5°	133.6	142.3	150.6	164.9	179.9
40°	117.6	127.3	137.4	150.6	163.9
42.5°	101.6	112.4	124.9	136.0	148.2
45°	87.0	97.8	112.4	122.1	132.2
47.5°	75.5	84.5	100.2	108.2	117.2
50°	67.8	74.1	88.0	94.3	100.9
52.5°	61.6	66.8	76.5	80.7	84.2
55°	55.3	60.9	66.8	67.1	66.4
57.5°	49.1	55.3	58.4	56.0	57.4
60°	43.8	50.1	51.5	49.1	50.4
62.5°	38.3	45.2	45.2	42.8	43.5
65°	33.7	40.0	39.0	36.9	37.2
67.5°	29.2	35.5	33.7	31.7	31.7
70°	25.0	31.0	28.9	26.8	26.8
72.5°	21.2	26.1	24.7	22.3	21.9
75°	17.7	21.9	20.2	18.1	17.7
77.5°	14.3	17.7	16.4	14.6	13.9
80°	11.1	14.3	12.5	11.1	10.4
82.5°	8.3	10.8	9.4	8.0	7.3
85°	5.6	7.3	6.6	5.2	4.5
87.5°	2.8	4.9	4.2	3.5	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)