

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 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: S122RDRP-S290D930-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
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: S122RDRP-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

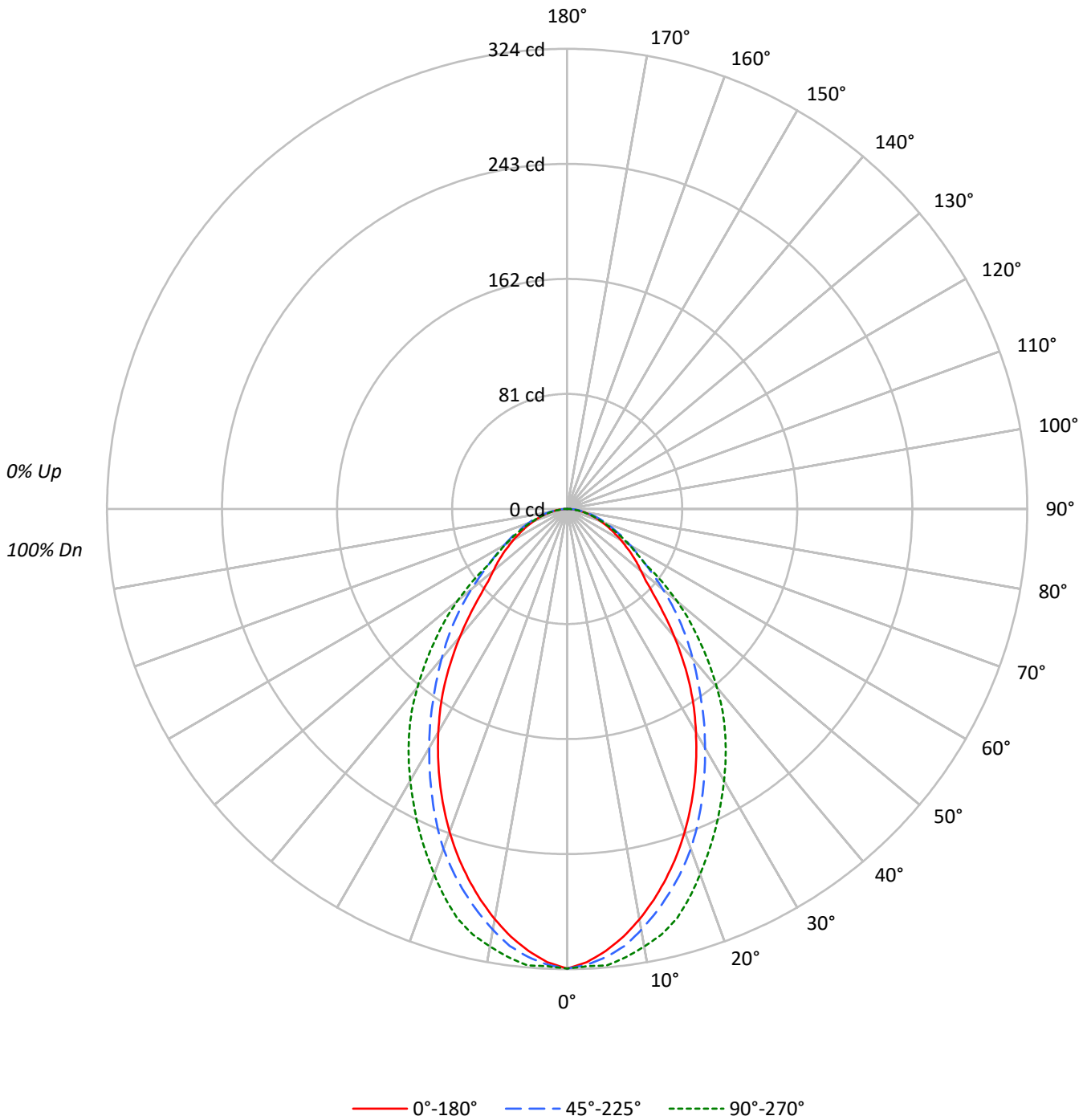
Lumens per Lamp: N/A
Luminaire Lumens: 527.5 lumens
Efficiency: N/A
Efficacy: 42.2 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	12.93	14.36	13.29	14.68	14.99	13.17	14.61	13.54	14.92	15.24
	3H	14.45	15.74	14.83	16.07	16.43	14.53	15.82	14.91	16.15	16.51
	4H	15.01	16.22	15.42	16.57	16.95	15.01	16.22	15.41	16.57	16.95
	6H	15.44	16.55	15.85	16.92	17.31	15.36	16.47	15.77	16.84	17.23
	8H	15.59	16.65	16.02	17.04	17.44	15.47	16.53	15.90	16.92	17.32
	12H	15.70	16.72	16.14	17.10	17.53	15.54	16.55	15.97	16.93	17.36
4H	2H	13.50	14.70	13.90	15.05	15.43	13.70	14.90	14.10	15.25	15.63
	3H	15.30	16.30	15.71	16.70	17.10	15.28	16.27	15.69	16.68	17.08
	4H	16.04	16.94	16.48	17.36	17.80	15.87	16.77	16.30	17.18	17.62
	6H	16.63	17.41	17.09	17.85	18.32	16.33	17.11	16.79	17.56	18.02
	8H	16.84	17.57	17.30	18.01	18.48	16.48	17.21	16.95	17.66	18.13
	12H	17.01	17.65	17.49	18.13	18.61	16.59	17.24	17.08	17.72	18.19
8H	4H	16.31	17.04	16.78	17.48	17.95	16.16	16.89	16.62	17.33	17.80
	6H	17.07	17.67	17.56	18.16	18.64	16.75	17.35	17.25	17.84	18.32
	8H	17.39	17.93	17.91	18.44	18.93	16.97	17.51	17.48	18.02	18.51
	12H	17.67	18.15	18.18	18.64	19.21	17.15	17.63	17.66	18.12	18.69
12H	4H	16.32	16.97	16.81	17.45	17.92	16.19	16.84	16.68	17.32	17.79
	6H	17.11	17.65	17.63	18.16	18.65	16.81	17.36	17.33	17.87	18.36
	8H	17.51	17.98	18.02	18.48	19.04	17.10	17.58	17.61	18.07	18.64