

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: P1058328

Luminaire Tested: S122RDRP-H290D930-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058328
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-H290D930-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

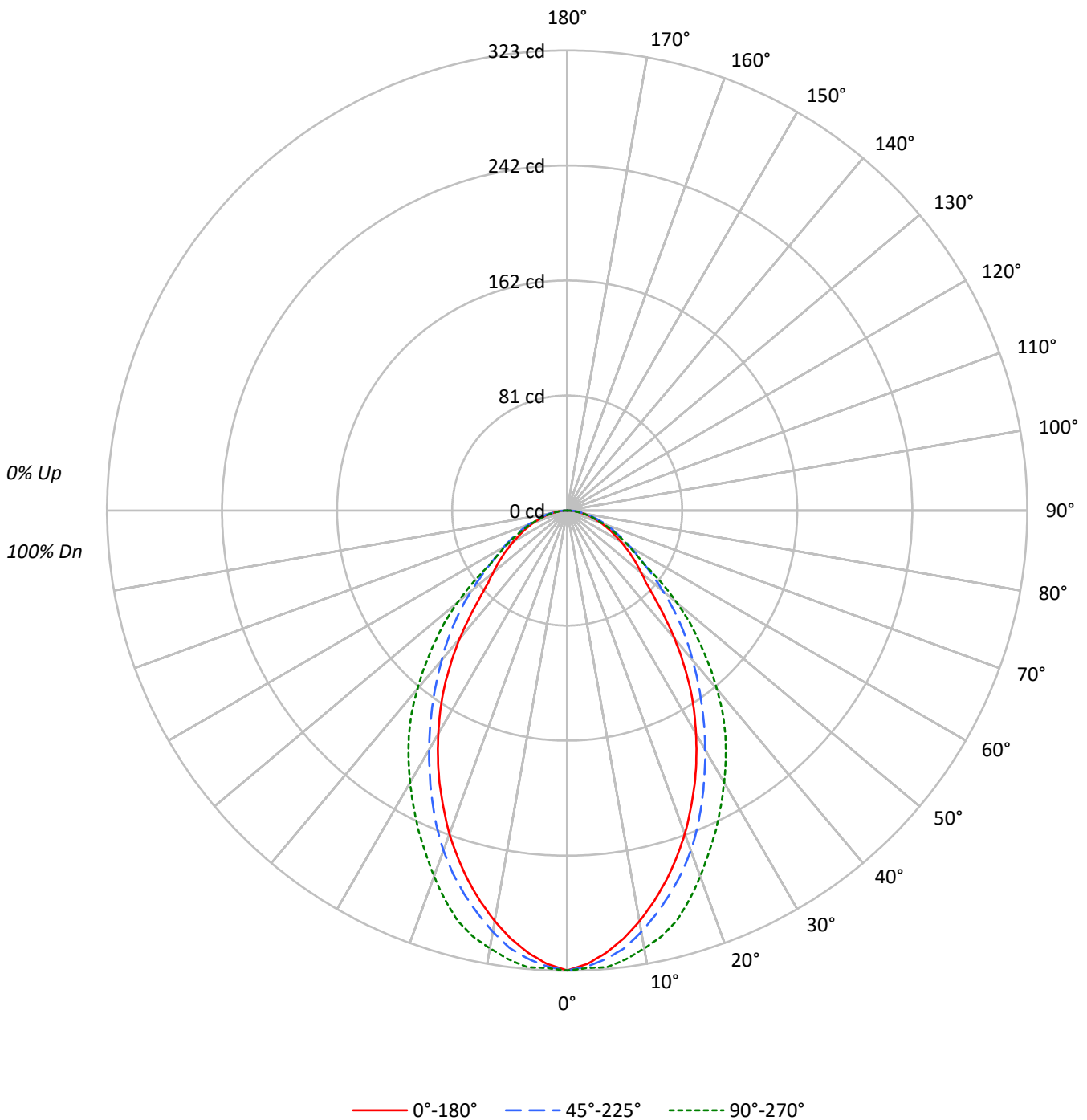
Lumens per Lamp: N/A
Luminaire Lumens: 526.2 lumens
Efficiency: N/A
Efficacy: 45.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
Input Voltage (V): 120
Input Current (A_{in}): 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	39	35	46	39	35	45	39	35	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5956	5956	5956
5°	5774	5850	5959
10°	5482	5625	5846
15°	5131	5324	5689
20°	4742	4988	5363
25°	4310	4565	5031
30°	3852	4127	4696
35°	3377	3699	4363
40°	2826	3302	3938
45°	2265	2925	3442
50°	1943	2520	2888
55°	1776	2143	2133
60°	1613	1897	1856
65°	1471	1698	1620
70°	1349	1554	1441
75°	1262	1433	1262
80°	1180	1328	1105
85°	1186	1397	953

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3442 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.8	5.7
10°-20°	78.9	15.0
20°-30°	104.0	19.8
30°-40°	104.8	19.9
40°-50°	85.3	16.2
50°-60°	58.1	11.0
60°-70°	37.7	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°	212.7	40.4
0°-40°	317.5	60.3
0°-60°	460.9	87.6
0°-90°	526.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	526.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	323	323	323	323	323	
5°	312	318	316	319	322	29
15°	269	276	279	290	298	75
25°	212	219	224	234	247	97
35°	150	158	164	178	194	93
45°	87	98	112	122	132	68
55°	55	61	67	67	66	49
65°	34	40	39	37	37	33
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°	322.8	322.8	322.8	322.8	322.8
2.5°	318.6	323.8	320.3	320.7	321.4
5°	311.7	317.6	315.8	318.6	321.7
7.5°	303.0	308.9	309.6	313.7	317.6
10°	292.6	299.2	300.2	306.4	312.0
12.5°	281.1	288.4	289.8	298.8	306.1
15°	268.6	275.6	278.7	290.1	297.8
17.5°	255.4	262.0	266.9	277.3	286.0
20°	241.5	247.8	254.0	263.4	273.1
22.5°	226.6	233.6	239.5	248.8	259.9
25°	211.7	218.6	224.2	234.3	247.1
27.5°	196.4	203.4	208.9	219.7	233.6
30°	180.8	188.1	193.7	205.8	220.4
32.5°	165.5	172.8	179.1	191.9	207.2
35°	149.9	157.6	164.2	178.4	193.7
37.5°	133.3	141.9	150.3	164.5	179.4
40°	117.3	127.0	137.1	150.3	163.5
42.5°	101.3	112.1	124.6	135.7	147.8
45°	86.8	97.5	112.1	121.8	131.9
47.5°	75.3	84.3	100.0	107.9	117.0
50°	67.7	73.9	87.8	94.1	100.6
52.5°	61.4	66.6	76.4	80.5	84.0
55°	55.2	60.7	66.6	67.0	66.3
57.5°	48.9	55.2	58.3	55.9	57.3
60°	43.7	50.0	51.4	48.9	50.3
62.5°	38.2	45.1	45.1	42.7	43.4
65°	33.7	39.9	38.9	36.8	37.1
67.5°	29.2	35.4	33.7	31.6	31.6
70°	25.0	30.9	28.8	26.7	26.7
72.5°	21.2	26.0	24.6	22.2	21.9
75°	17.7	21.9	20.1	18.0	17.7
77.5°	14.2	17.7	16.3	14.6	13.9
80°	11.1	14.2	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	12.92	14.36	13.28	14.67	14.99	13.17	14.61	13.53	14.92	15.23
	3H	14.45	15.74	14.83	16.06	16.43	14.53	15.81	14.90	16.14	16.50
	4H	15.01	16.22	15.41	16.57	16.95	15.01	16.21	15.41	16.56	16.94
	6H	15.43	16.55	15.85	16.91	17.31	15.35	16.47	15.77	16.83	17.23
	8H	15.59	16.64	16.01	17.03	17.44	15.46	16.52	15.89	16.91	17.31
	12H	15.70	16.71	16.13	17.09	17.52	15.53	16.54	15.96	16.93	17.36
4H	2H	13.49	14.70	13.89	15.05	15.43	13.69	14.90	14.09	15.25	15.63
	3H	15.30	16.29	15.71	16.70	17.10	15.27	16.26	15.68	16.67	17.07
	4H	16.04	16.94	16.47	17.35	17.79	15.86	16.75	16.29	17.17	17.61
	6H	16.62	17.40	17.08	17.85	18.31	16.33	17.11	16.79	17.55	18.01
	8H	16.83	17.56	17.30	18.01	18.48	16.48	17.21	16.94	17.65	18.12
	12H	17.00	17.65	17.48	18.13	18.60	16.59	17.24	17.07	17.72	18.19
8H	4H	16.30	17.03	16.77	17.48	17.95	16.15	16.88	16.61	17.32	17.79
	6H	17.06	17.66	17.56	18.15	18.63	16.74	17.34	17.24	17.83	18.31
	8H	17.38	17.92	17.90	18.43	18.92	16.96	17.50	17.48	18.01	18.50
	12H	17.67	18.14	18.18	18.64	19.20	17.14	17.62	17.66	18.11	18.68
12H	4H	16.32	16.97	16.80	17.45	17.92	16.18	16.83	16.66	17.31	17.78
	6H	17.10	17.64	17.62	18.16	18.64	16.81	17.35	17.32	17.86	18.35
	8H	17.50	17.98	18.01	18.47	19.04	17.09	17.57	17.60	18.06	18.63