

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: P1055217

Luminaire Tested: S122R3DRP-S485D935-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1055217  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122R3DRP-S485D935-X4F0-XX-UDD-F-W  
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

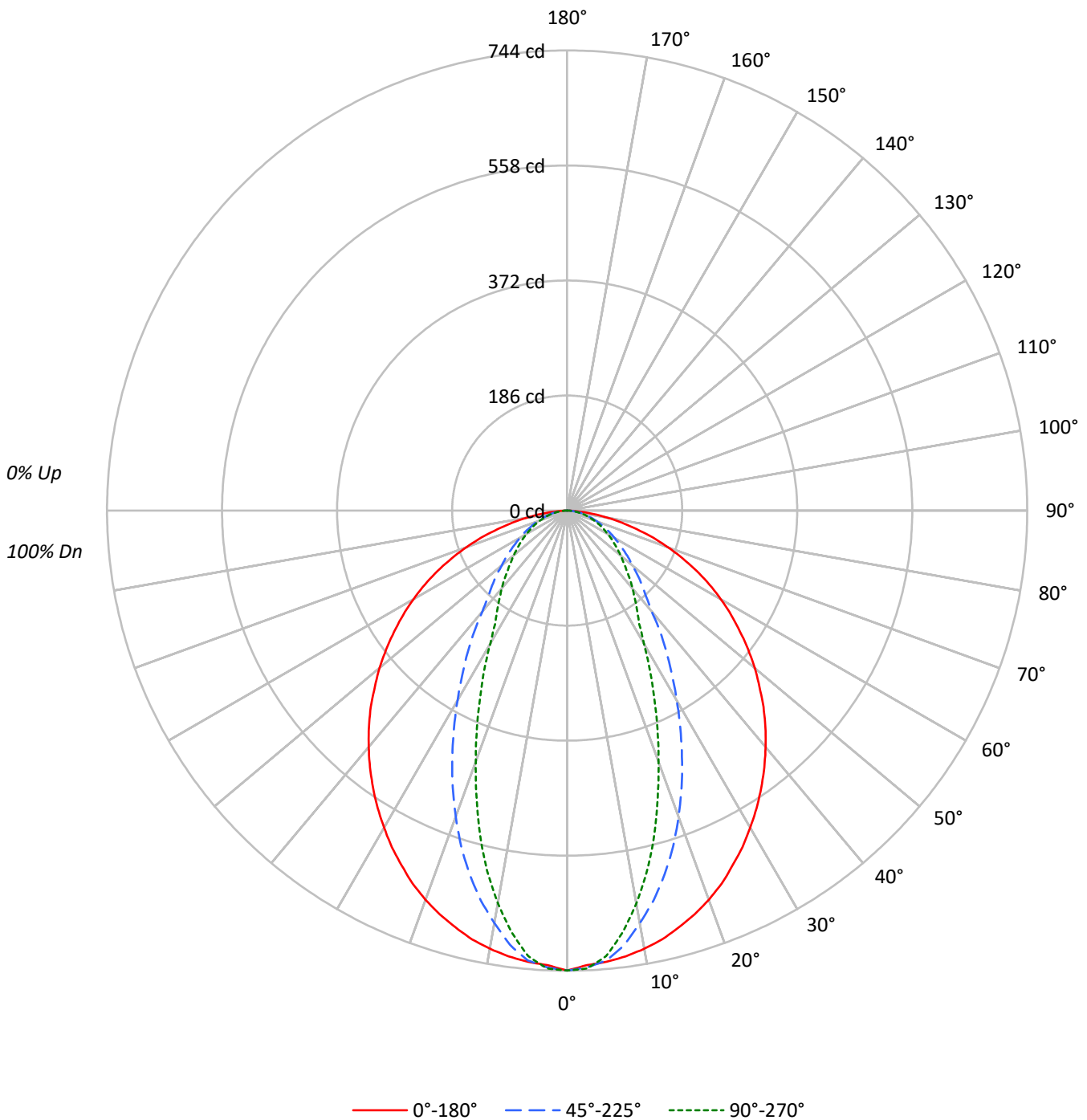
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1124.8 lumens  
Efficiency: N/A  
Efficacy: 58.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9  
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	14088	14088	14088
5°	13929	13883	13752
10°	13840	13026	12405
15°	13683	11939	10670
20°	13500	10617	8712
25°	13233	9177	6953
30°	12949	7753	5428
35°	12656	6485	4559
40°	12349	5258	4059
45°	12028	4598	3631
50°	11675	4067	3316
55°	11274	3676	3082
60°	10886	3346	2876
65°	10369	3066	2703
70°	9611	2858	2548
75°	8513	2591	2416
80°	7255	2444	2237
85°	5000	2152	2022

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12028 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.1	6.1
10°-20°	172.0	15.3
20°-30°	212.0	18.8
30°-40°	203.4	18.1
40°-50°	175.4	15.6
50°-60°	136.1	12.1
60°-70°	93.2	8.3
70°-80°	50.6	4.5
80°-90°	13.9	1.2
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°	452.2	40.2
0°-40°	655.6	58.3
0°-60°	967.1	86.0
0°-90°	1124.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1124.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	744	744	744	744	744	
5°	732	743	730	721	723	70
15°	698	676	609	559	544	197
25°	633	565	439	358	333	292
35°	547	434	280	209	197	342
45°	449	302	172	142	136	346
55°	341	182	111	96	93	306
65°	231	99	68	62	60	228
75°	116	45	35	34	33	125
85°	23	11	10	10	9	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	743.6	743.6	743.6	743.6	743.6
2.5°	735.5	748.0	739.3	739.3	741.1
5°	732.4	743.0	730.0	720.6	723.1
7.5°	726.8	734.3	708.2	688.3	687.7
10°	719.4	720.0	677.1	651.0	644.8
12.5°	710.1	700.1	645.4	606.2	596.9
15°	697.6	676.5	608.7	559.0	544.0
17.5°	684.6	652.2	569.5	507.4	486.8
20°	669.6	623.0	526.6	455.8	432.1
22.5°	652.9	595.0	483.7	406.0	381.1
25°	633.0	565.2	439.0	358.1	332.6
27.5°	613.7	534.7	396.1	315.9	289.7
30°	591.9	501.8	354.4	275.4	248.1
32.5°	570.2	468.2	315.9	236.9	216.4
35°	547.2	434.0	280.4	208.9	197.1
37.5°	523.5	400.4	246.8	190.3	179.7
40°	499.3	366.8	212.6	172.2	164.1
42.5°	474.4	333.9	189.0	157.3	149.8
45°	448.9	302.2	171.6	141.8	135.5
47.5°	421.6	270.5	154.8	128.7	123.1
50°	396.1	240.0	138.0	116.9	112.5
52.5°	368.7	210.2	124.4	106.3	102.6
55°	341.3	181.6	111.3	96.4	93.3
57.5°	314.6	154.2	98.9	87.0	84.6
60°	287.3	132.4	88.3	78.3	75.9
62.5°	259.3	115.0	78.3	70.3	67.8
65°	231.3	98.9	68.4	62.2	60.3
67.5°	202.1	83.3	59.7	54.7	53.5
70°	173.5	69.6	51.6	47.3	46.0
72.5°	145.5	56.6	43.5	40.4	39.2
75°	116.3	45.4	35.4	33.6	33.0
77.5°	90.8	35.4	28.6	27.4	26.7
80°	66.5	26.1	22.4	21.1	20.5
82.5°	44.1	18.0	16.2	15.5	14.9
85°	23.0	11.2	9.9	9.9	9.3
87.5°	7.5	5.0	5.0	5.0	4.4
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	18.80	20.27	19.16	20.58	20.90	13.60	15.07	13.97	15.38	15.70
	3H	21.13	22.45	21.51	22.77	23.14	15.25	16.57	15.63	16.90	17.26
	4H	22.03	23.26	22.43	23.61	23.99	15.89	17.12	16.29	17.47	17.85
	6H	22.69	23.83	23.10	24.19	24.59	16.38	17.52	16.79	17.89	18.28
	8H	22.90	23.98	23.32	24.37	24.77	16.55	17.64	16.98	18.03	18.43
	12H	23.01	24.05	23.44	24.43	24.86	16.67	17.70	17.10	18.09	18.52
4H	2H	18.82	20.05	19.22	20.40	20.78	14.32	15.55	14.72	15.90	16.28
	3H	21.23	22.25	21.64	22.65	23.06	16.17	17.19	16.58	17.59	18.00
	4H	22.16	23.08	22.59	23.50	23.94	16.92	17.84	17.35	18.26	18.70
	6H	22.94	23.74	23.39	24.18	24.64	17.53	18.33	17.99	18.78	19.24
	8H	23.21	23.95	23.67	24.40	24.87	17.75	18.50	18.21	18.94	19.41
	12H	23.38	24.05	23.87	24.53	25.00	17.91	18.57	18.39	19.05	19.53
8H	4H	22.15	22.90	22.62	23.35	23.81	17.30	18.04	17.76	18.49	18.96
	6H	22.96	23.58	23.46	24.07	24.55	18.03	18.65	18.53	19.14	19.62
	8H	23.26	23.81	23.77	24.32	24.81	18.33	18.88	18.84	19.39	19.88
	12H	23.49	23.98	24.00	24.47	25.04	18.57	19.06	19.08	19.55	20.12
12H	4H	22.13	22.80	22.61	23.28	23.75	17.35	18.02	17.84	18.50	18.97
	6H	22.93	23.49	23.45	24.00	24.49	18.12	18.67	18.63	19.18	19.67
	8H	23.27	23.76	23.78	24.25	24.82	18.47	18.96	18.98	19.45	20.02