

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: P1057841

Luminaire Tested: S122RDRP-S1005D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1057841  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S1005D930-X4F0-XX-UDD-WVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

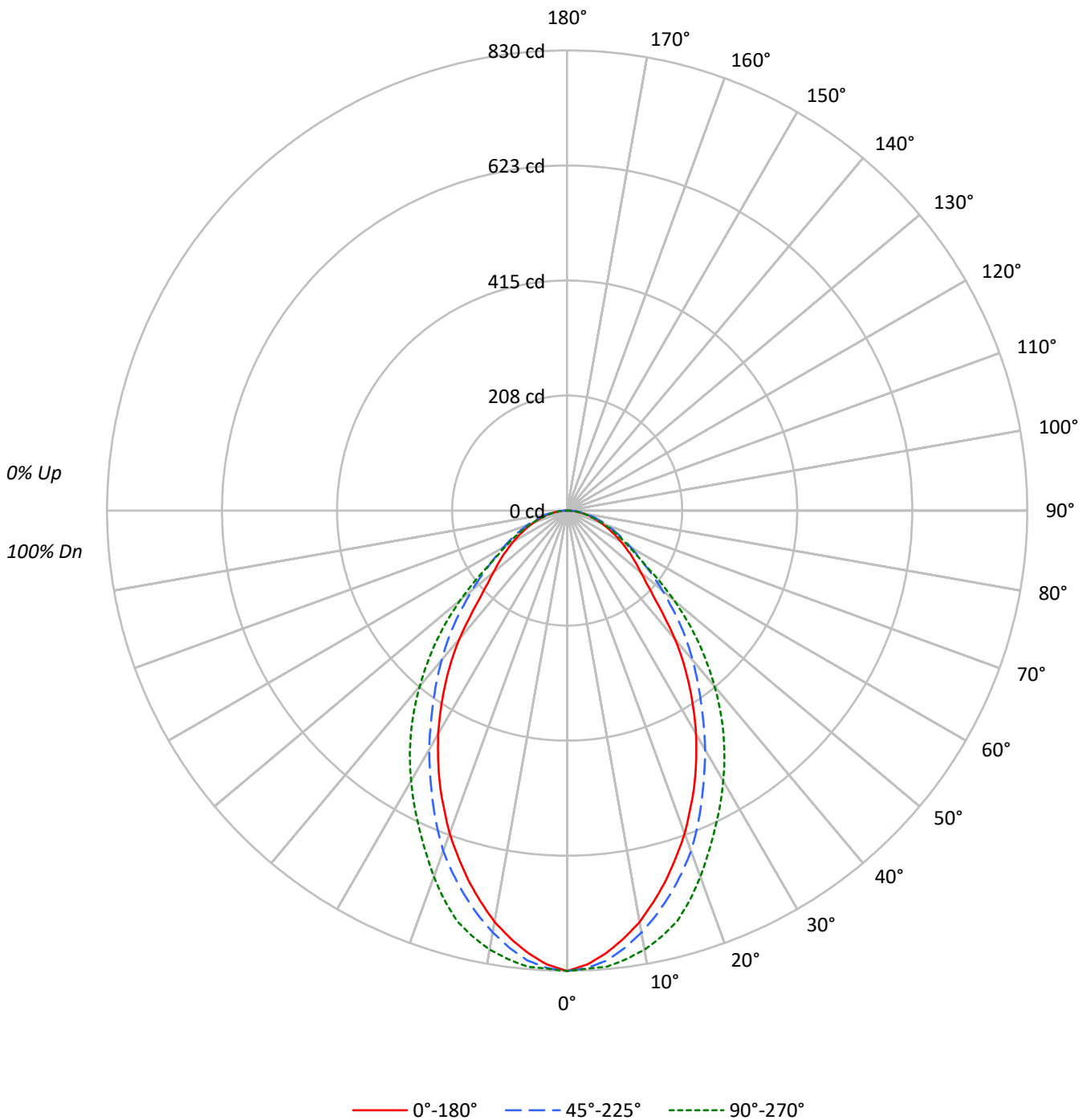
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1352.4 lumens  
Efficiency: N/A  
Efficacy: 32.4 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): 41.8  
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34

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

	0°	45°	90°
0°	15325	15325	15325
5°	14848	15093	15294
10°	14117	14478	15065
15°	13172	13701	14645
20°	12167	12829	13799
25°	11068	11707	12859
30°	9914	10607	11994
35°	8634	9477	11078
40°	7289	8479	9960
45°	5788	7487	8713
50°	4984	6436	7231
55°	4536	5508	5546
60°	4137	4894	4716
65°	3790	4423	4157
70°	3512	4095	3706
75°	3265	3864	3265
80°	3071	3719	2943
85°	3070	3832	2562

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8713 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.7	5.7
10°-20°	202.7	15.0
20°-30°	266.7	19.7
30°-40°	268.2	19.8
40°-50°	217.4	16.1
50°-60°	149.7	11.1
60°-70°	98.0	7.2
70°-80°	54.6	4.0
80°-90°	18.5	1.4
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°	546.1	40.4
0°-40°	814.3	60.2
0°-60°	1181.3	87.4
0°-90°	1352.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1352.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	830	830	830	830	830	
5°	802	817	815	818	826	75
15°	690	706	717	744	767	193
25°	544	558	575	600	632	249
35°	383	401	421	458	492	239
45°	222	247	287	312	334	175
55°	141	157	171	175	172	126
65°	87	104	101	96	95	87
75°	46	57	54	48	46	49
85°	14	19	18	16	12	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	830.5	830.5	830.5	830.5	830.5
2.5°	819.7	834.1	825.7	825.7	826.9
5°	801.6	817.3	814.8	818.5	825.7
7.5°	778.7	795.6	795.6	806.4	816.1
10°	753.4	770.3	772.7	789.5	804.0
12.5°	722.0	738.9	746.1	767.8	787.1
15°	689.5	706.4	717.2	743.7	766.6
17.5°	654.5	671.4	685.9	713.6	736.5
20°	619.6	635.2	653.3	677.4	702.7
22.5°	581.0	597.9	614.8	637.7	666.6
25°	543.6	558.1	575.0	600.3	631.6
27.5°	503.9	519.5	535.2	565.3	597.9
30°	465.3	481.0	497.8	529.2	562.9
32.5°	424.3	441.2	458.1	493.0	528.0
35°	383.3	401.4	420.7	458.1	491.8
37.5°	343.5	362.8	385.7	424.3	453.2
40°	302.6	323.0	352.0	385.7	413.5
42.5°	259.2	284.5	319.4	348.4	373.7
45°	221.8	247.1	286.9	312.2	333.9
47.5°	194.1	214.6	253.1	274.8	292.9
50°	173.6	189.2	224.2	239.9	251.9
52.5°	156.7	172.4	196.5	207.3	210.9
55°	141.0	156.7	171.2	174.8	172.4
57.5°	125.4	142.2	150.7	147.1	147.1
60°	112.1	130.2	132.6	127.8	127.8
62.5°	98.8	116.9	116.9	110.9	110.9
65°	86.8	103.7	101.3	96.4	95.2
67.5°	75.9	91.6	88.0	83.2	82.0
70°	65.1	79.6	75.9	69.9	68.7
72.5°	55.4	68.7	63.9	59.1	56.7
75°	45.8	56.7	54.2	48.2	45.8
77.5°	37.4	45.8	43.4	38.6	36.2
80°	28.9	36.2	35.0	30.1	27.7
82.5°	21.7	27.7	26.5	22.9	19.3
85°	14.5	19.3	18.1	15.7	12.1
87.5°	7.2	13.3	12.1	10.8	6.0
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	16.21	17.65	16.58	17.97	18.28	16.57	18.01	16.94	18.33	18.64
	3H	17.76	19.05	18.13	19.37	19.74	17.92	19.21	18.30	19.54	19.90
	4H	18.33	19.54	18.73	19.88	20.26	18.40	19.61	18.80	19.96	20.34
	6H	18.76	19.87	19.17	20.24	20.63	18.76	19.87	19.17	20.24	20.63
	8H	18.91	19.97	19.34	20.36	20.76	18.87	19.93	19.30	20.32	20.73
	12H	19.03	20.04	19.46	20.42	20.85	18.95	19.96	19.38	20.35	20.77
4H	2H	16.80	18.01	17.20	18.36	18.74	17.09	18.30	17.49	18.65	19.03
	3H	18.62	19.62	19.03	20.02	20.42	18.66	19.66	19.07	20.06	20.47
	4H	19.37	20.27	19.80	20.69	21.13	19.27	20.17	19.70	20.58	21.02
	6H	19.95	20.74	20.41	21.18	21.64	19.75	20.53	20.21	20.97	21.44
	8H	20.16	20.90	20.63	21.34	21.81	19.91	20.64	20.38	21.09	21.56
	12H	20.33	20.99	20.82	21.47	21.94	20.03	20.68	20.52	21.16	21.64
8H	4H	19.65	20.38	20.12	20.83	21.30	19.57	20.30	20.03	20.74	21.21
	6H	20.41	21.01	20.91	21.51	21.99	20.18	20.79	20.68	21.28	21.76
	8H	20.73	21.28	21.25	21.79	22.28	20.43	20.97	20.95	21.49	21.98
	12H	21.02	21.50	21.53	21.99	22.56	20.64	21.12	21.16	21.62	22.18
12H	4H	19.67	20.32	20.16	20.80	21.28	19.60	20.25	20.08	20.73	21.20
	6H	20.47	21.01	20.99	21.52	22.01	20.26	20.80	20.78	21.32	21.80
	8H	20.87	21.35	21.38	21.84	22.41	20.58	21.06	21.09	21.55	22.12