

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



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: P1058499

Luminaire Tested: S122RDR-H675D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058499  
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-H675D935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

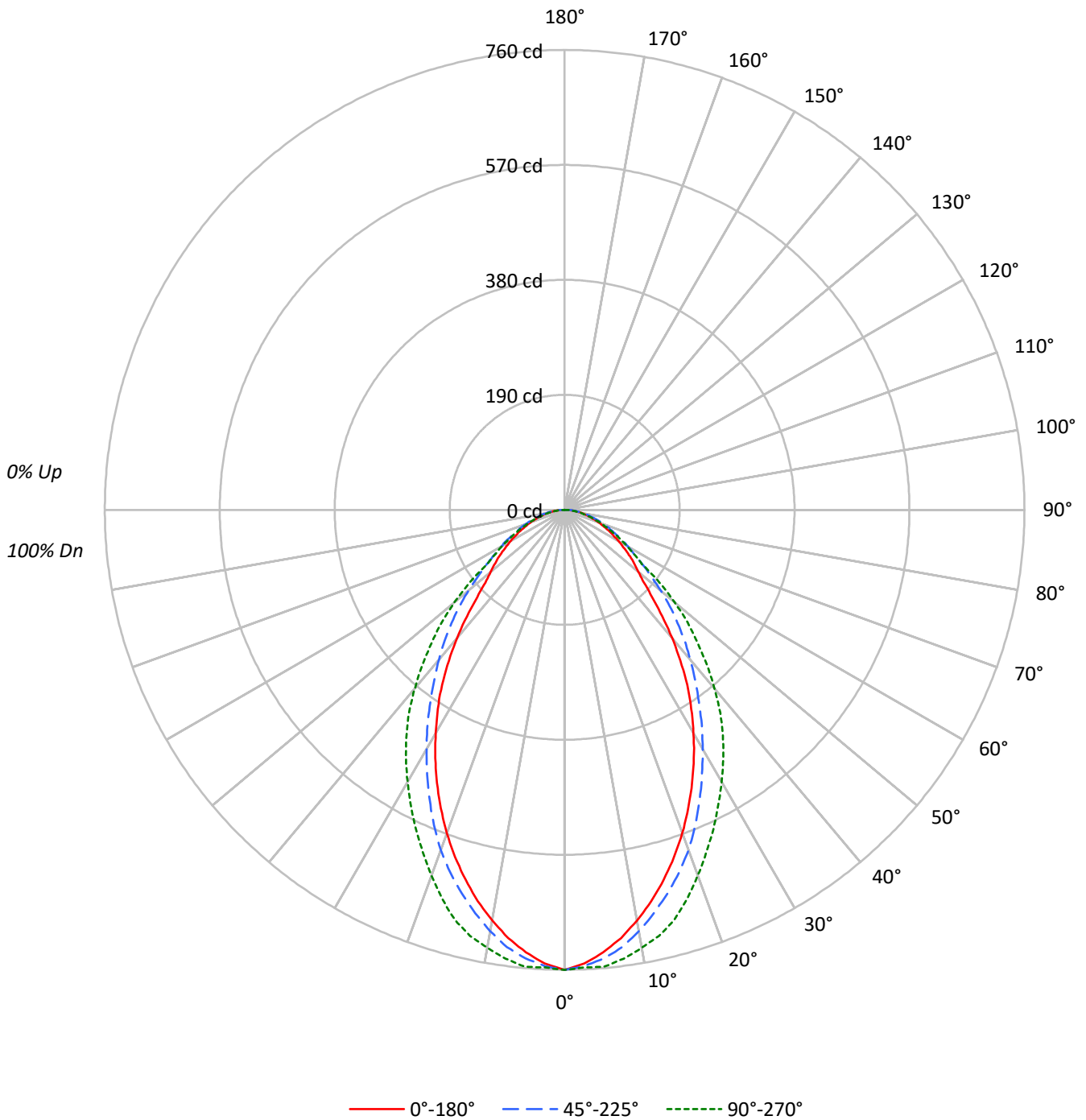
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1239.3 lumens  
Efficiency: N/A  
Efficacy: 52.7 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): 23.5  
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

TEST NUMBER: P1058499

CATALOG NUMBER: S122RDR-H675D935-X4F0-XX-UDD-WVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1058499

CATALOG NUMBER: S122RDR-H675D935-X4F0-XX-UDD-WVL-W

**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	100	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°	14028	14028	14028
5°	13596	13777	14035
10°	12912	13249	13768
15°	12087	12539	13397
20°	11171	11749	12632
25°	10152	10750	11850
30°	9075	9718	11061
35°	7954	8709	10274
40°	6656	7778	9274
45°	5334	6889	8105
50°	4576	5937	6804
55°	4182	5048	5022
60°	3801	4465	4373
65°	3462	3995	3820
70°	3178	3658	3394
75°	2973	3379	2973
80°	2784	3124	2603
85°	2774	3282	2244

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8105 cd/sqm



TEST NUMBER: P1058499

CATALOG NUMBER: S122RDR-H675D935-X4F0-XX-UDD-WVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.2	5.7
10°-20°	185.8	15.0
20°-30°	245.0	19.8
30°-40°	246.8	19.9
40°-50°	200.8	16.2
50°-60°	136.9	11.0
60°-70°	88.9	7.2
70°-80°	48.9	3.9
80°-90°	16.0	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°	501.0	40.4
0°-40°	747.8	60.3
0°-60°	1085.5	87.6
0°-90°	1239.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1239.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	760	760	760	760	760	
5°	734	748	744	750	758	69
15°	633	649	656	683	701	177
25°	499	515	528	552	582	229
35°	353	371	387	420	456	219
45°	204	230	264	287	311	161
55°	130	143	157	158	156	116
65°	79	94	92	87	88	79
75°	42	52	47	42	42	44
85°	13	17	16	12	11	14
90°	0	0	0	0	0	

TEST NUMBER: P1058499

CATALOG NUMBER: S122RDR-H675D935-X4F0-XX-UDD-WVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	760.2	760.2	760.2	760.2	760.2
2.5°	750.4	762.6	754.5	755.3	756.9
5°	734.0	747.9	743.8	750.4	757.7
7.5°	713.6	727.5	729.1	738.9	747.9
10°	689.1	704.6	707.1	721.8	734.8
12.5°	662.1	679.3	682.5	703.8	721.0
15°	632.7	649.0	656.4	683.4	701.3
17.5°	601.6	617.1	628.6	653.1	673.5
20°	568.9	583.6	598.3	620.4	643.3
22.5°	533.8	550.1	564.0	586.1	612.2
25°	498.6	515.0	528.0	551.7	582.0
27.5°	462.7	479.0	492.1	517.4	550.1
30°	425.9	443.0	456.1	484.7	519.1
32.5°	389.9	407.1	421.8	452.0	488.0
35°	353.1	371.1	386.6	420.1	456.1
37.5°	313.9	334.3	353.9	387.5	422.6
40°	276.3	299.2	322.9	353.9	385.0
42.5°	238.7	264.0	293.4	319.6	348.2
45°	204.4	229.7	264.0	286.9	310.6
47.5°	177.4	198.6	235.4	254.2	275.5
50°	159.4	174.1	206.8	221.5	237.0
52.5°	144.7	156.9	179.8	189.6	197.8
55°	130.0	143.0	156.9	157.8	156.1
57.5°	115.3	130.0	137.3	131.6	134.9
60°	103.0	117.7	121.0	115.3	118.5
62.5°	89.9	106.3	106.3	100.5	102.2
65°	79.3	94.0	91.5	86.6	87.5
67.5°	68.7	83.4	79.3	74.4	74.4
70°	58.9	72.7	67.8	62.9	62.9
72.5°	49.9	61.3	58.0	52.3	51.5
75°	41.7	51.5	47.4	42.5	41.7
77.5°	33.5	41.7	38.4	34.3	32.7
80°	26.2	33.5	29.4	26.2	24.5
82.5°	19.6	25.3	22.1	18.8	17.2
85°	13.1	17.2	15.5	12.3	10.6
87.5°	6.5	11.4	9.8	8.2	6.5
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058499  
 CATALOG NUMBER: S122RDR-H675D935-X4F0-XX-UDD-WVL-W

**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	15.90	17.33	16.26	17.65	17.96	16.14	17.58	16.51	17.89	18.21
	3H	17.42	18.71	17.80	19.04	19.40	17.50	18.79	17.88	19.12	19.48
	4H	17.99	19.19	18.39	19.54	19.92	17.98	19.19	18.38	19.54	19.92
	6H	18.41	19.52	18.82	19.89	20.28	18.33	19.44	18.74	19.81	20.20
	8H	18.56	19.62	18.99	20.01	20.41	18.44	19.49	18.87	19.88	20.29
	12H	18.68	19.69	19.11	20.07	20.50	18.51	19.52	18.94	19.90	20.33
4H	2H	16.47	17.67	16.87	18.02	18.40	16.66	17.87	17.07	18.22	18.60
	3H	18.27	19.27	18.68	19.67	20.07	18.24	19.24	18.65	19.64	20.04
	4H	19.01	19.91	19.45	20.33	20.77	18.83	19.73	19.27	20.15	20.59
	6H	19.60	20.38	20.06	20.82	21.29	19.30	20.08	19.76	20.53	20.99
	8H	19.81	20.54	20.28	20.98	21.45	19.45	20.18	19.92	20.63	21.10
	12H	19.98	20.62	20.46	21.10	21.58	19.56	20.21	20.05	20.69	21.16
8H	4H	19.28	20.01	19.74	20.45	20.92	19.12	19.85	19.59	20.30	20.77
	6H	20.03	20.63	20.53	21.13	21.61	19.71	20.32	20.21	20.81	21.29
	8H	20.36	20.90	20.87	21.41	21.90	19.94	20.48	20.45	20.99	21.48
	12H	20.64	21.12	21.15	21.61	22.18	20.12	20.60	20.63	21.09	21.66
12H	4H	19.29	19.94	19.78	20.42	20.89	19.16	19.81	19.64	20.29	20.76
	6H	20.08	20.62	20.60	21.13	21.62	19.78	20.32	20.30	20.83	21.32
	8H	20.48	20.95	20.99	21.45	22.01	20.07	20.55	20.58	21.04	21.61