

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: P1058256

Luminaire Tested: S122RDR-H1005D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058256  
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-H1005D935-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: -

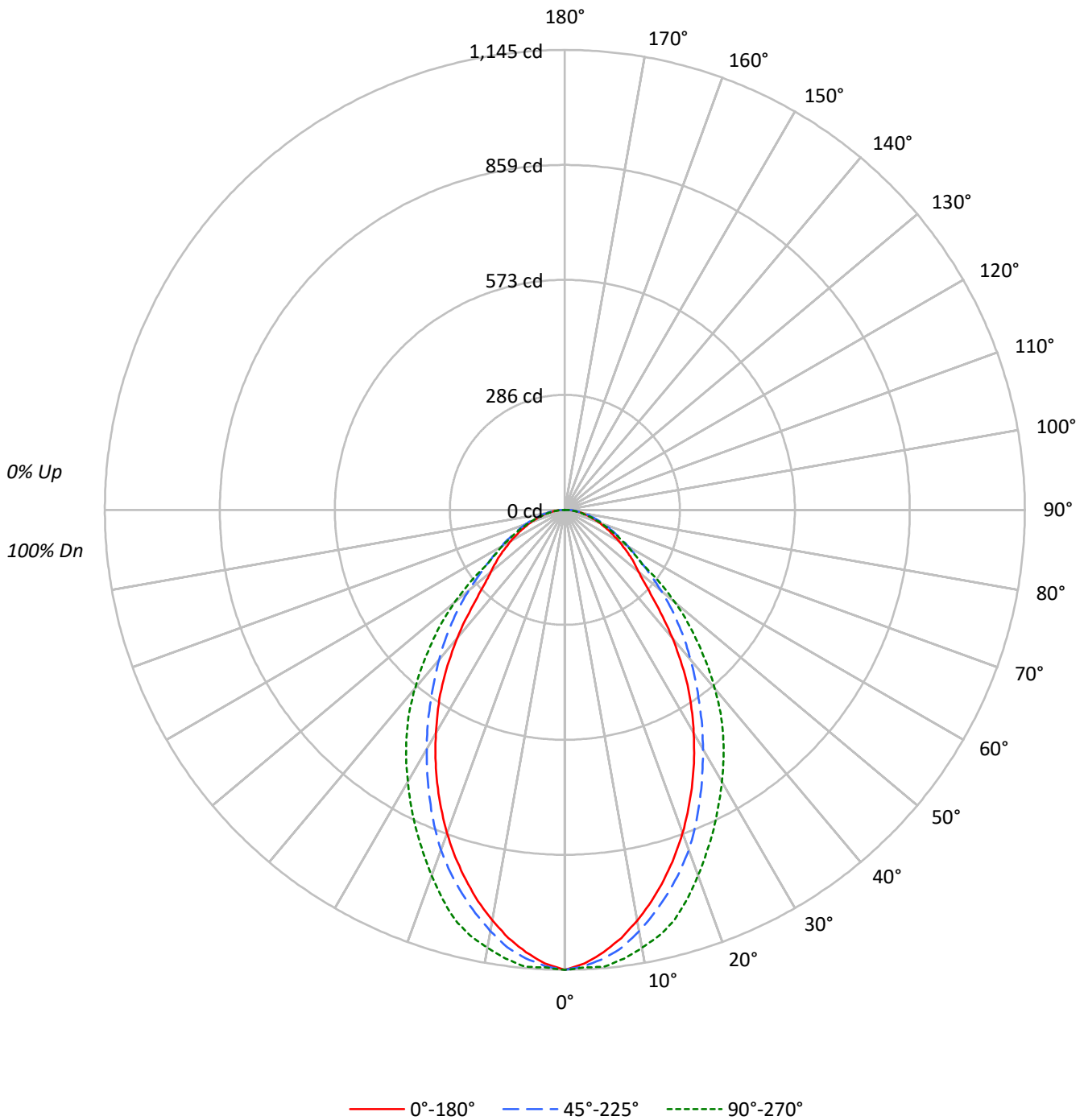
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1867.1 lumens  
Efficiency: N/A  
Efficacy: 51.2 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): 36.5  
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°	21132	21132	21132
5°	20483	20757	21146
10°	19451	19959	20744
15°	18207	18891	20185
20°	16831	17701	19032
25°	15294	16196	17852
30°	13671	14640	16662
35°	11984	13122	15478
40°	10025	11716	13971
45°	8035	10381	12213
50°	6893	8945	10251
55°	6299	7605	7567
60°	5728	6728	6591
65°	5218	6021	5755
70°	4785	5514	5115
75°	4477	5090	4477
80°	4187	4707	3921
85°	4171	4954	3387

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12213 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.7	5.7
10°-20°	279.9	15.0
20°-30°	369.2	19.8
30°-40°	371.8	19.9
40°-50°	302.6	16.2
50°-60°	206.3	11.0
60°-70°	133.9	7.2
70°-80°	73.7	3.9
80°-90°	24.1	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°	754.8	40.4
0°-40°	1126.5	60.3
0°-60°	1635.4	87.6
0°-90°	1867.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1867.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1145	1145	1145	1145	1145	
5°	1106	1127	1121	1130	1142	103
15°	953	978	989	1030	1057	267
25°	751	776	796	831	877	344
35°	532	559	582	633	687	330
45°	308	346	398	432	468	243
55°	196	216	236	238	235	175
65°	120	142	138	130	132	119
75°	63	78	71	64	63	67
85°	20	26	23	18	16	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1145.2	1145.2	1145.2	1145.2	1145.2
2.5°	1130.5	1148.9	1136.6	1137.9	1140.3
5°	1105.8	1126.8	1120.6	1130.5	1141.6
7.5°	1075.1	1096.0	1098.5	1113.2	1126.8
10°	1038.1	1061.5	1065.2	1087.4	1107.1
12.5°	997.5	1023.3	1028.3	1060.3	1086.1
15°	953.1	977.8	988.9	1029.5	1056.6
17.5°	906.3	929.7	947.0	983.9	1014.7
20°	857.1	879.3	901.4	934.7	969.2
22.5°	804.1	828.8	849.7	883.0	922.4
25°	751.2	775.8	795.5	831.2	876.8
27.5°	697.0	721.6	741.3	779.5	828.8
30°	641.6	667.4	687.1	730.3	782.0
32.5°	587.4	613.3	635.4	681.0	735.2
35°	532.0	559.1	582.5	633.0	687.1
37.5°	472.9	503.7	533.2	583.7	636.7
40°	416.2	450.7	486.4	533.2	580.0
42.5°	359.6	397.8	442.1	481.5	524.6
45°	307.9	346.0	397.8	432.2	468.0
47.5°	267.2	299.2	354.7	383.0	415.0
50°	240.1	262.3	311.6	333.7	357.1
52.5°	218.0	236.4	270.9	285.7	298.0
55°	195.8	215.5	236.4	237.7	235.2
57.5°	173.6	195.8	206.9	198.3	203.2
60°	155.2	177.3	182.3	173.6	178.6
62.5°	135.5	160.1	160.1	151.5	153.9
65°	119.5	141.6	137.9	130.5	131.8
67.5°	103.4	125.6	119.5	112.1	112.1
70°	88.7	109.6	102.2	94.8	94.8
72.5°	75.1	92.4	87.4	78.8	77.6
75°	62.8	77.6	71.4	64.0	62.8
77.5°	50.5	62.8	57.9	51.7	49.3
80°	39.4	50.5	44.3	39.4	36.9
82.5°	29.6	38.2	33.2	28.3	25.9
85°	19.7	25.9	23.4	18.5	16.0
87.5°	9.9	17.2	14.8	12.3	9.9
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	17.32	18.76	17.68	19.07	19.38	17.57	19.01	17.93	19.32	19.63
	3H	18.85	20.13	19.22	20.46	20.82	18.92	20.21	19.30	20.54	20.90
	4H	19.41	20.61	19.81	20.96	21.34	19.41	20.61	19.81	20.96	21.34
	6H	19.83	20.94	20.25	21.31	21.71	19.75	20.87	20.17	21.23	21.63
	8H	19.99	21.04	20.41	21.43	21.84	19.86	20.92	20.29	21.31	21.71
	12H	20.10	21.11	20.53	21.49	21.92	19.93	20.94	20.36	21.32	21.75
4H	2H	17.89	19.10	18.29	19.44	19.82	18.09	19.29	18.49	19.64	20.02
	3H	19.69	20.69	20.11	21.09	21.50	19.67	20.66	20.08	21.06	21.47
	4H	20.44	21.33	20.87	21.75	22.19	20.26	21.16	20.69	21.57	22.01
	6H	21.02	21.80	21.48	22.25	22.71	20.73	21.51	21.19	21.95	22.41
	8H	21.23	21.96	21.70	22.41	22.88	20.88	21.61	21.34	22.05	22.52
	12H	21.40	22.05	21.88	22.53	23.00	20.99	21.64	21.47	22.12	22.59
8H	4H	20.70	21.43	21.17	21.88	22.34	20.55	21.28	21.01	21.72	22.19
	6H	21.46	22.06	21.96	22.55	23.03	21.14	21.74	21.64	22.23	22.71
	8H	21.78	22.32	22.30	22.83	23.32	21.36	21.90	21.88	22.41	22.90
	12H	22.06	22.54	22.58	23.03	23.60	21.54	22.02	22.06	22.51	23.08
12H	4H	20.72	21.36	21.20	21.84	22.32	20.58	21.23	21.07	21.71	22.18
	6H	21.50	22.04	22.02	22.55	23.04	21.21	21.75	21.72	22.26	22.75
	8H	21.90	22.38	22.41	22.87	23.44	21.49	21.97	22.00	22.46	23.03