

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: P1059066

Luminaire Tested: S123RDRP-S1000D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1059066  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDRP-S1000D935-X4F0-XX-UDD-WVL-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

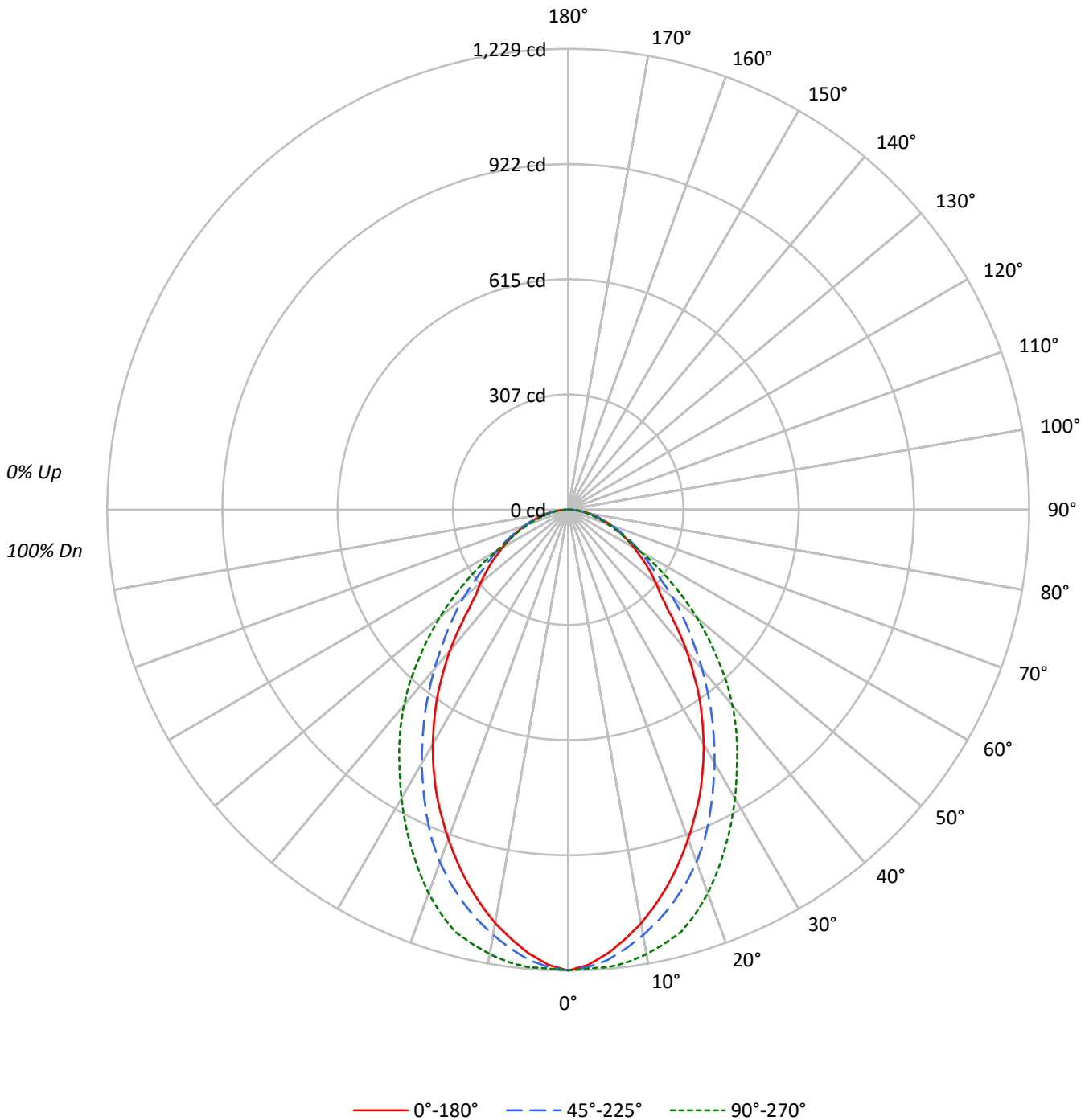
Lumens per Lamp: N/A  
Luminaire Lumens: 2159.1 lumens  
Efficiency: N/A  
Efficacy: 61.7 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35  
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	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32

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

	0°	45°	90°
0°	14428	14428	14428
5°	14010	14210	14434
10°	13352	13730	14349
15°	12559	13177	14166
20°	11681	12500	13597
25°	10782	11591	12851
30°	9792	10581	12058
35°	8716	9550	11263
40°	7522	8510	10439
45°	6216	7533	9359
50°	5583	6646	8171
55°	5173	5671	6776
60°	4767	5164	5190
65°	4437	4671	4348
70°	4175	4247	3811
75°	3934	3788	3357
80°	3719	3435	3144
85°	3557	3853	3557

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9359 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.8	5.3
10°-20°	306.6	14.2
20°-30°	414.8	19.2
30°-40°	426.2	19.7
40°-50°	358.0	16.6
50°-60°	256.6	11.9
60°-70°	163.4	7.6
70°-80°	89.8	4.2
80°-90°	29.9	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°	835.2	38.7
0°-40°	1261.4	58.4
0°-60°	1876.0	86.9
0°-90°	2159.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2159.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1229	1229	1229	1229	1229	
5°	1189	1210	1206	1214	1224	111
15°	1033	1062	1084	1130	1165	289
25°	832	864	895	943	992	381
35°	608	641	666	725	786	378
45°	374	407	454	519	564	296
55°	253	258	277	314	331	226
65°	160	169	168	159	156	159
75°	87	95	84	77	74	92
85°	26	28	29	30	26	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1228.7	1228.7	1228.7	1228.7	1228.7
2.5°	1215.0	1231.9	1220.3	1221.3	1224.5
5°	1188.6	1209.7	1205.5	1213.9	1224.5
7.5°	1155.8	1179.0	1180.1	1200.2	1217.1
10°	1119.8	1144.1	1151.5	1182.2	1203.4
12.5°	1077.5	1104.0	1119.8	1157.9	1185.4
15°	1033.1	1061.7	1083.9	1130.4	1165.3
17.5°	984.5	1015.1	1043.7	1093.4	1129.3
20°	934.8	967.6	1000.3	1046.9	1088.1
22.5°	883.0	916.8	950.6	996.1	1041.6
25°	832.2	863.9	894.6	943.2	991.9
27.5°	777.2	810.0	836.4	890.4	941.1
30°	722.2	755.0	780.4	836.4	889.3
32.5°	665.1	699.0	722.2	780.4	835.4
35°	608.0	640.8	666.2	725.4	785.7
37.5°	547.8	583.7	609.1	675.7	734.9
40°	490.7	524.5	555.2	624.9	681.0
42.5°	431.4	466.3	501.2	573.1	624.9
45°	374.3	407.1	453.6	519.2	563.6
47.5°	333.1	354.2	408.2	463.2	505.5
50°	305.6	314.1	363.8	412.4	447.3
52.5°	278.1	284.5	318.3	362.7	389.1
55°	252.7	258.0	277.0	314.1	331.0
57.5°	225.2	230.5	246.4	267.5	277.0
60°	203.0	207.3	219.9	223.1	221.0
62.5°	180.8	187.2	193.5	186.1	182.9
65°	159.7	169.2	168.1	158.6	156.5
67.5°	140.6	150.2	144.9	135.4	132.2
70°	121.6	131.1	123.7	114.2	111.0
72.5°	103.6	114.2	102.6	94.1	92.0
75°	86.7	95.2	83.5	77.2	74.0
77.5°	70.8	77.2	66.6	61.3	59.2
80°	55.0	59.2	50.8	47.6	46.5
82.5°	40.2	42.3	37.0	39.1	38.1
85°	26.4	27.5	28.6	29.6	26.4
87.5°	12.7	18.0	18.0	16.9	13.7
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	16.46	17.92	16.82	18.23	18.55	17.53	18.99	17.89	19.30	19.62
	3H	18.16	19.47	18.53	19.79	20.16	18.61	19.92	18.99	20.25	20.61
	4H	18.81	20.04	19.21	20.39	20.77	19.01	20.24	19.41	20.59	20.97
	6H	19.31	20.45	19.73	20.81	21.21	19.32	20.46	19.74	20.82	21.22
	8H	19.49	20.56	19.91	20.95	21.36	19.46	20.54	19.89	20.93	21.33
	12H	19.61	20.64	20.04	21.02	21.45	19.58	20.61	20.01	20.99	21.42
4H	2H	17.06	18.29	17.46	18.64	19.02	17.93	19.16	18.33	19.51	19.89
	3H	18.99	20.01	19.40	20.41	20.81	19.25	20.27	19.66	20.67	21.07
	4H	19.80	20.72	20.23	21.13	21.57	19.77	20.68	20.20	21.10	21.54
	6H	20.45	21.24	20.91	21.69	22.15	20.20	21.00	20.66	21.44	21.90
	8H	20.67	21.41	21.13	21.86	22.33	20.39	21.14	20.86	21.58	22.05
	12H	20.84	21.51	21.32	21.98	22.46	20.57	21.24	21.06	21.72	22.19
8H	4H	20.04	20.78	20.50	21.23	21.69	20.01	20.76	20.48	21.20	21.67
	6H	20.82	21.44	21.32	21.93	22.41	20.56	21.18	21.06	21.67	22.15
	8H	21.14	21.69	21.65	22.20	22.69	20.84	21.39	21.35	21.90	22.39
	12H	21.41	21.89	21.92	22.39	22.95	21.13	21.62	21.64	22.11	22.68
12H	4H	20.05	20.71	20.53	21.19	21.66	20.04	20.70	20.52	21.18	21.66
	6H	20.86	21.41	21.37	21.92	22.41	20.61	21.17	21.13	21.68	22.17
	8H	21.23	21.72	21.74	22.22	22.78	20.95	21.44	21.47	21.94	22.50