

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: P1059048

Luminaire Tested: S123RDRP-S1000D927-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059048
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-S1000D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

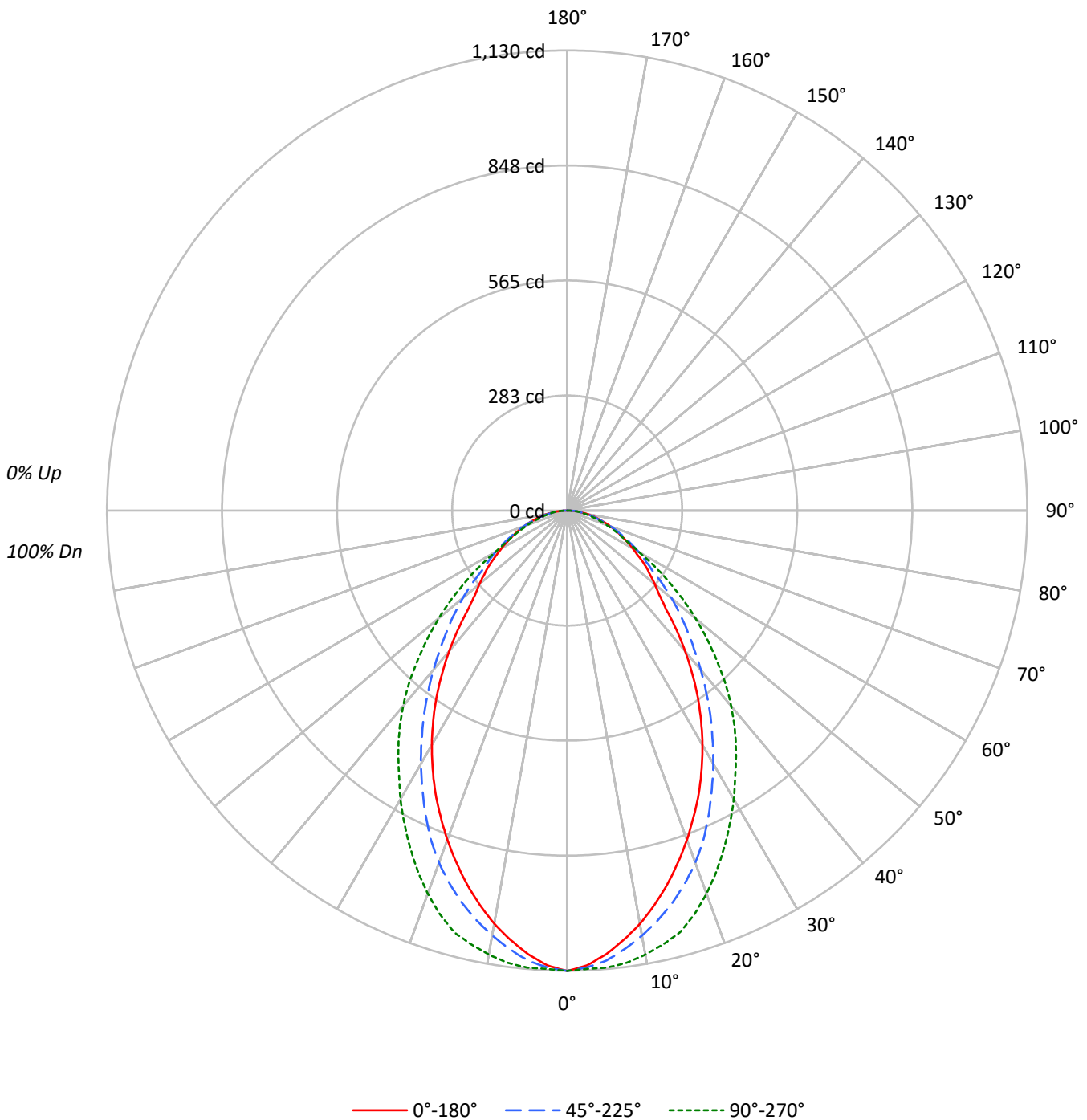
Lumens per Lamp: N/A
Luminaire Lumens: 1986.6 lumens
Efficiency: N/A
Efficacy: 56.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (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	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°	13275	13275	13275
5°	12891	13073	13280
10°	12285	12633	13202
15°	11555	12123	13034
20°	10748	11501	12510
25°	9921	10664	11824
30°	9010	9735	11094
35°	8019	8786	10363
40°	6919	7830	9605
45°	5719	6931	8612
50°	5137	6114	7517
55°	4760	5218	6234
60°	4387	4753	4774
65°	4082	4298	4001
70°	3842	3907	3509
75°	3620	3489	3090
80°	3422	3158	2894
85°	3274	3543	3274

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8612 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.7	5.3
10°-20°	282.1	14.2
20°-30°	381.6	19.2
30°-40°	392.2	19.7
40°-50°	329.4	16.6
50°-60°	236.1	11.9
60°-70°	150.3	7.6
70°-80°	82.6	4.2
80°-90°	27.5	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°	768.4	38.7
0°-40°	1160.6	58.4
0°-60°	1726.1	86.9
0°-90°	1986.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1986.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1130	1130	1130	1130	1130	
5°	1094	1113	1109	1117	1127	102
15°	950	977	997	1040	1072	266
25°	766	795	823	868	913	351
35°	559	590	613	667	723	348
45°	344	375	417	478	519	272
55°	232	237	255	289	304	208
65°	147	156	155	146	144	146
75°	80	88	77	71	68	85
85°	24	25	26	27	24	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1130.5	1130.5	1130.5	1130.5	1130.5
2.5°	1117.9	1133.5	1122.8	1123.7	1126.6
5°	1093.6	1113.0	1109.1	1116.9	1126.6
7.5°	1063.4	1084.8	1085.8	1104.3	1119.8
10°	1030.3	1052.7	1059.5	1087.7	1107.2
12.5°	991.4	1015.7	1030.3	1065.3	1090.6
15°	950.5	976.8	997.2	1040.1	1072.2
17.5°	905.8	934.0	960.3	1006.0	1039.1
20°	860.1	890.2	920.4	963.2	1001.1
22.5°	812.4	843.5	874.7	916.5	958.3
25°	765.7	794.9	823.1	867.8	912.6
27.5°	715.1	745.3	769.6	819.2	865.9
30°	664.5	694.7	718.0	769.6	818.2
32.5°	612.0	643.1	664.5	718.0	768.6
35°	559.4	589.6	612.9	667.4	722.9
37.5°	504.0	537.1	560.4	621.7	676.2
40°	451.4	482.6	510.8	575.0	626.6
42.5°	397.0	429.1	461.2	527.3	575.0
45°	344.4	374.6	417.4	477.7	518.6
47.5°	306.5	325.9	375.5	426.1	465.1
50°	281.2	289.0	334.7	379.4	411.5
52.5°	255.9	261.7	292.8	333.7	358.0
55°	232.5	237.4	254.9	289.0	304.5
57.5°	207.2	212.1	226.7	246.1	254.9
60°	186.8	190.7	202.4	205.3	203.3
62.5°	166.4	172.2	178.0	171.2	168.3
65°	146.9	155.7	154.7	145.9	144.0
67.5°	129.4	138.2	133.3	124.5	121.6
70°	111.9	120.6	113.8	105.1	102.2
72.5°	95.3	105.1	94.4	86.6	84.6
75°	79.8	87.6	76.9	71.0	68.1
77.5°	65.2	71.0	61.3	56.4	54.5
80°	50.6	54.5	46.7	43.8	42.8
82.5°	37.0	38.9	34.1	36.0	35.0
85°	24.3	25.3	26.3	27.2	24.3
87.5°	11.7	16.5	16.5	15.6	12.6
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	16.17	17.63	16.53	17.95	18.26	17.24	18.70	17.60	19.01	19.33
	3H	17.87	19.18	18.24	19.51	19.87	18.32	19.63	18.70	19.96	20.32
	4H	18.52	19.75	18.92	20.10	20.48	18.72	19.95	19.12	20.30	20.68
	6H	19.02	20.16	19.44	20.53	20.92	19.03	20.17	19.45	20.54	20.93
	8H	19.20	20.27	19.62	20.66	21.07	19.17	20.25	19.60	20.64	21.04
	12H	19.32	20.35	19.75	20.74	21.17	19.29	20.32	19.72	20.70	21.13
4H	2H	16.77	18.00	17.17	18.35	18.73	17.64	18.87	18.04	19.22	19.60
	3H	18.70	19.72	19.11	20.12	20.52	18.96	19.98	19.37	20.38	20.78
	4H	19.51	20.43	19.94	20.84	21.28	19.48	20.39	19.91	20.81	21.25
	6H	20.16	20.95	20.62	21.40	21.86	19.91	20.71	20.37	21.15	21.61
	8H	20.38	21.12	20.84	21.57	22.04	20.10	20.85	20.57	21.29	21.76
	12H	20.55	21.22	21.04	21.70	22.17	20.28	20.95	20.77	21.43	21.90
8H	4H	19.75	20.49	20.21	20.94	21.41	19.72	20.47	20.19	20.91	21.38
	6H	20.54	21.15	21.03	21.64	22.12	20.27	20.89	20.77	21.38	21.86
	8H	20.85	21.40	21.36	21.91	22.40	20.55	21.10	21.06	21.61	22.10
	12H	21.12	21.61	21.63	22.10	22.66	20.84	21.33	21.35	21.82	22.39
12H	4H	19.76	20.42	20.24	20.90	21.37	19.75	20.41	20.23	20.89	21.37
	6H	20.57	21.12	21.09	21.63	22.12	20.32	20.88	20.84	21.39	21.88
	8H	20.95	21.43	21.46	21.93	22.49	20.67	21.15	21.18	21.65	22.21