

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: P1059228

Luminaire Tested: S123RDRP-S340D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059228
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-S340D935-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

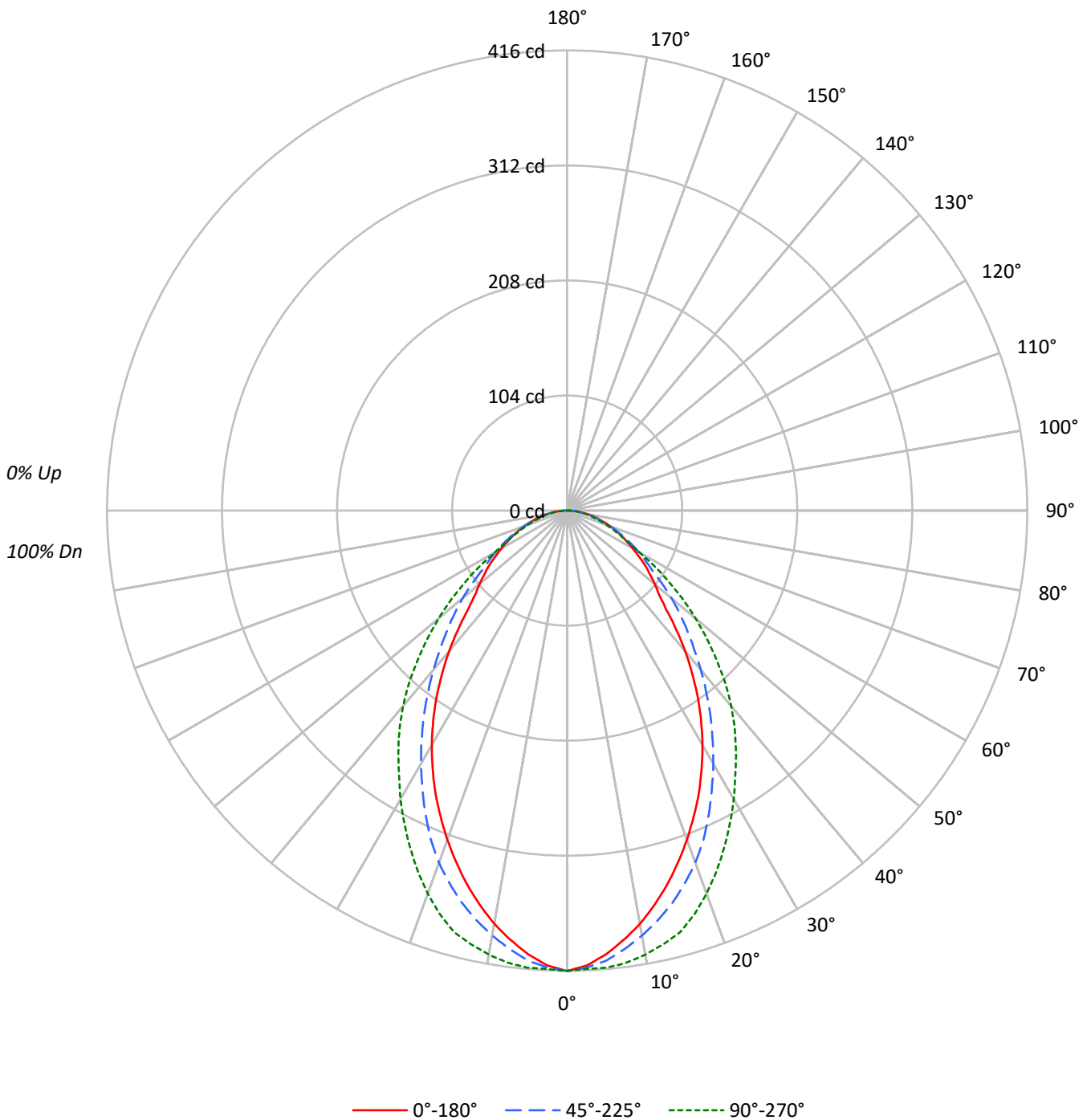
Lumens per Lamp: N/A
Luminaire Lumens: 731.3 lumens
Efficiency: N/A
Efficacy: 58.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (A_{in}): 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°	4887	4887	4887
5°	4746	4813	4888
10°	4523	4650	4860
15°	4254	4463	4798
20°	3956	4234	4605
25°	3652	3926	4353
30°	3317	3584	4084
35°	2952	3234	3815
40°	2548	2882	3536
45°	2106	2552	3170
50°	1891	2251	2768
55°	1752	1920	2295
60°	1616	1750	1759
65°	1503	1581	1473
70°	1415	1439	1291
75°	1334	1284	1139
80°	1258	1163	1068
85°	1213	1307	1213

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3170 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.5	5.3
10°-20°	103.8	14.2
20°-30°	140.5	19.2
30°-40°	144.4	19.7
40°-50°	121.2	16.6
50°-60°	86.9	11.9
60°-70°	55.3	7.6
70°-80°	30.4	4.2
80°-90°	10.1	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°	282.9	38.7
0°-40°	427.2	58.4
0°-60°	635.4	86.9
0°-90°	731.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	731.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	416	416	416	416	416	
5°	403	410	408	411	415	38
15°	350	360	367	383	395	98
25°	282	293	303	320	336	129
35°	206	217	226	246	266	128
45°	127	138	154	176	191	100
55°	86	87	94	106	112	76
65°	54	57	57	54	53	54
75°	29	32	28	26	25	31
85°	9	9	10	10	9	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	416.2	416.2	416.2	416.2	416.2
2.5°	411.5	417.3	413.3	413.7	414.7
5°	402.6	409.7	408.3	411.2	414.7
7.5°	391.5	399.3	399.7	406.5	412.2
10°	379.3	387.5	390.0	400.4	407.6
12.5°	365.0	373.9	379.3	392.2	401.5
15°	349.9	359.6	367.1	382.9	394.7
17.5°	333.4	343.8	353.5	370.3	382.5
20°	316.6	327.7	338.8	354.6	368.5
22.5°	299.1	310.5	322.0	337.4	352.8
25°	281.9	292.6	303.0	319.5	336.0
27.5°	263.2	274.4	283.3	301.6	318.8
30°	244.6	255.7	264.3	283.3	301.2
32.5°	225.3	236.7	244.6	264.3	282.9
35°	205.9	217.0	225.6	245.7	266.1
37.5°	185.5	197.7	206.3	228.9	248.9
40°	166.2	177.6	188.0	211.7	230.7
42.5°	146.1	157.9	169.8	194.1	211.7
45°	126.8	137.9	153.7	175.9	190.9
47.5°	112.8	120.0	138.2	156.9	171.2
50°	103.5	106.4	123.2	139.7	151.5
52.5°	94.2	96.3	107.8	122.8	131.8
55°	85.6	87.4	93.8	106.4	112.1
57.5°	76.3	78.1	83.5	90.6	93.8
60°	68.8	70.2	74.5	75.6	74.9
62.5°	61.2	63.4	65.5	63.0	62.0
65°	54.1	57.3	56.9	53.7	53.0
67.5°	47.6	50.9	49.1	45.8	44.8
70°	41.2	44.4	41.9	38.7	37.6
72.5°	35.1	38.7	34.7	31.9	31.2
75°	29.4	32.2	28.3	26.1	25.1
77.5°	24.0	26.1	22.6	20.8	20.1
80°	18.6	20.1	17.2	16.1	15.8
82.5°	13.6	14.3	12.5	13.3	12.9
85°	9.0	9.3	9.7	10.0	9.0
87.5°	4.3	6.1	6.1	5.7	4.7
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	12.70	14.16	13.06	14.48	14.79	13.77	15.23	14.13	15.54	15.86
	3H	14.40	15.71	14.77	16.03	16.40	14.85	16.16	15.23	16.49	16.85
	4H	15.05	16.28	15.45	16.63	17.01	15.25	16.48	15.65	16.83	17.21
	6H	15.55	16.69	15.97	17.05	17.45	15.56	16.70	15.98	17.06	17.46
	8H	15.72	16.80	16.15	17.19	17.59	15.70	16.78	16.13	17.17	17.57
	12H	15.85	16.88	16.28	17.26	17.69	15.82	16.85	16.25	17.23	17.66
4H	2H	13.30	14.53	13.70	14.88	15.26	14.17	15.40	14.57	15.75	16.13
	3H	15.23	16.24	15.64	16.65	17.05	15.49	16.50	15.90	16.91	17.31
	4H	16.04	16.95	16.47	17.37	17.81	16.01	16.92	16.44	17.34	17.78
	6H	16.69	17.48	17.14	17.92	18.39	16.44	17.24	16.90	17.68	18.14
	8H	16.91	17.65	17.37	18.10	18.56	16.63	17.38	17.10	17.82	18.29
	12H	17.08	17.74	17.56	18.22	18.70	16.81	17.48	17.30	17.96	18.43
8H	4H	16.27	17.02	16.74	17.46	17.93	16.25	17.00	16.72	17.44	17.91
	6H	17.06	17.68	17.56	18.17	18.65	16.80	17.42	17.30	17.91	18.39
	8H	17.38	17.93	17.89	18.44	18.93	17.08	17.63	17.59	18.14	18.63
	12H	17.64	18.13	18.15	18.63	19.19	17.37	17.86	17.88	18.35	18.92
12H	4H	16.29	16.95	16.77	17.43	17.90	16.28	16.94	16.76	17.42	17.89
	6H	17.10	17.65	17.61	18.16	18.65	16.85	17.41	17.37	17.92	18.41
	8H	17.47	17.96	17.98	18.45	19.02	17.20	17.68	17.71	18.18	18.74