

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: P1059019

Luminaire Tested: S123RDRP-S1000D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059019
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1000D835-X4F0-XX-UDD-WVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

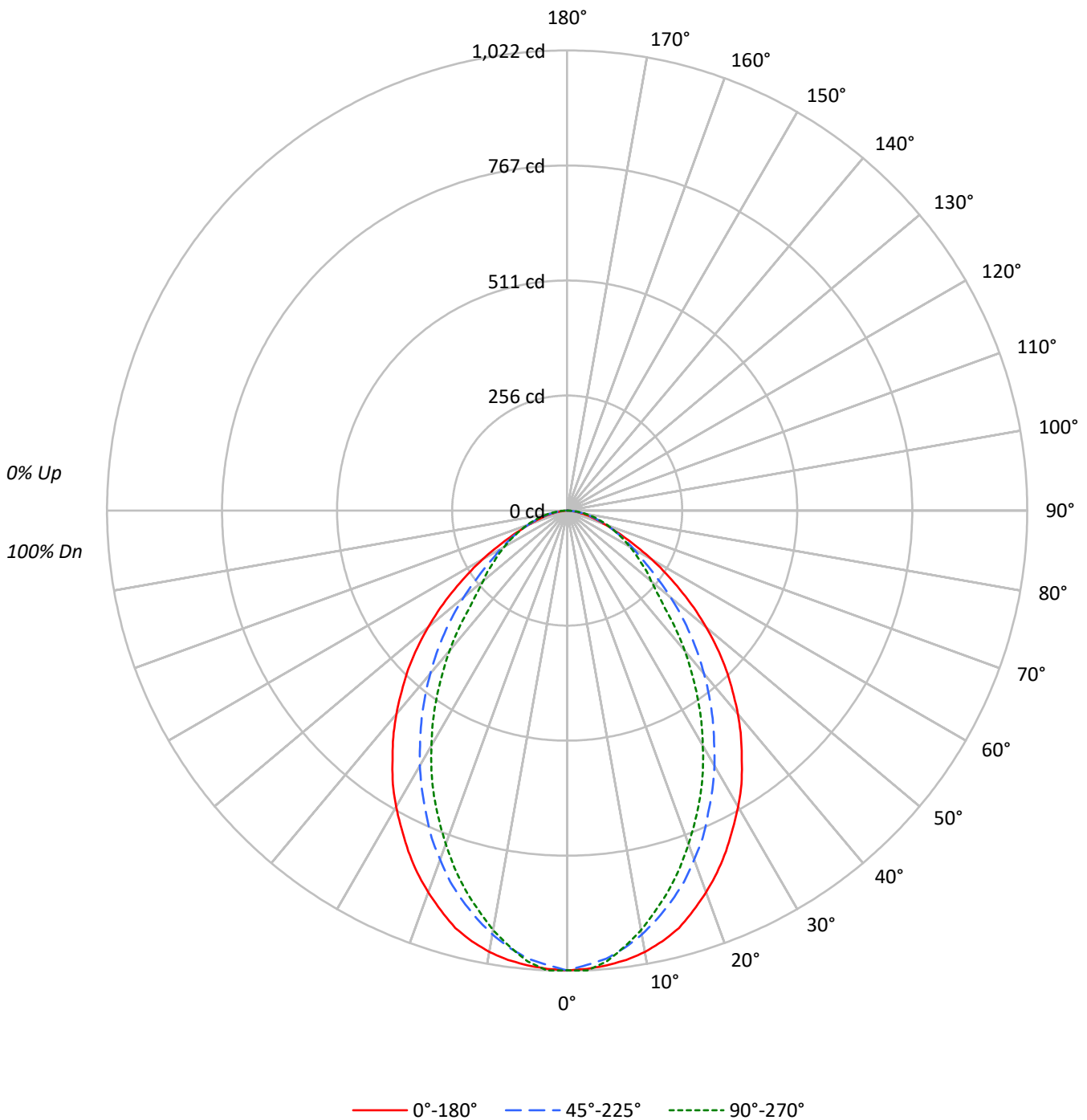
Lumens per Lamp: N/A
Luminaire Lumens: 1786.0 lumens
Efficiency: N/A
Efficacy: 51.0 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88
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	73	69	76	72	68	66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11990	11990	11990
5°	11950	11776	11849
10°	11869	11400	11283
15°	11668	10907	10608
20°	11273	10307	9846
25°	10813	9605	9064
30°	10301	8870	8171
35°	9695	8075	7231
40°	9049	7243	6227
45°	8295	6400	5116
50°	7355	5493	4439
55°	6256	4598	4070
60°	5101	4007	3776
65°	3887	3545	3512
70°	3035	3159	3286
75°	2450	2840	3062
80°	1826	2326	2820
85°	997	1482	2479

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8295 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.8	5.3
10°-20°	255.0	14.3
20°-30°	346.7	19.4
30°-40°	359.4	20.1
40°-50°	303.1	17.0
50°-60°	215.2	12.0
60°-70°	131.5	7.4
70°-80°	65.4	3.7
80°-90°	14.9	0.8
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°	696.5	39.0
0°-40°	1055.9	59.1
0°-60°	1574.2	88.1
0°-90°	1786.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1786.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1021	1021	1021	1021	1021	
5°	1014	1014	999	1005	1005	96
15°	960	941	897	881	873	269
25°	835	798	741	714	700	384
35°	676	625	563	524	504	423
45°	500	447	385	333	308	384
55°	306	274	225	205	199	274
65°	140	135	128	128	126	143
75°	54	58	63	65	68	58
85°	7	9	11	16	18	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1021.1	1021.1	1021.1	1021.1	1021.1
2.5°	1018.7	1019.9	1010.1	1021.1	1022.4
5°	1013.8	1013.8	999.0	1005.2	1005.2
7.5°	1006.4	1003.9	979.4	979.4	976.9
10°	995.4	988.0	956.1	949.9	946.3
12.5°	979.4	967.1	927.9	916.8	909.4
15°	959.8	941.4	897.2	881.2	872.6
17.5°	931.5	913.1	864.0	841.9	832.1
20°	902.1	875.1	824.8	802.7	787.9
22.5°	870.2	835.8	786.7	759.7	743.8
25°	834.6	797.8	741.3	714.3	699.6
27.5°	796.5	756.0	698.3	667.7	652.9
30°	759.7	713.1	654.2	619.8	602.6
32.5°	720.4	667.7	607.5	571.9	554.7
35°	676.3	624.7	563.3	524.1	504.4
37.5°	634.5	581.7	517.9	476.2	454.1
40°	590.3	537.6	472.5	429.6	406.2
42.5°	543.7	493.4	429.6	379.2	357.1
45°	499.5	446.7	385.4	332.6	308.1
47.5°	451.7	402.6	342.4	288.4	271.2
50°	402.6	357.1	300.7	251.6	243.0
52.5°	354.7	316.6	259.0	227.1	223.4
55°	305.6	273.7	224.6	205.0	198.8
57.5°	260.2	236.9	192.7	182.9	180.4
60°	217.2	197.6	170.6	164.5	160.8
62.5°	175.5	164.5	148.5	146.1	143.6
65°	139.9	135.0	127.6	127.6	126.4
67.5°	110.5	110.5	109.2	111.7	110.5
70°	88.4	89.6	92.0	94.5	95.7
72.5°	70.0	73.6	76.1	79.8	81.0
75°	54.0	57.7	62.6	65.0	67.5
77.5°	39.3	43.0	47.9	51.5	54.0
80°	27.0	29.5	34.4	39.3	41.7
82.5°	17.2	18.4	22.1	27.0	29.5
85°	7.4	8.6	11.0	16.0	18.4
87.5°	0.0	0.0	1.2	4.9	8.6
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	17.44	18.89	17.81	19.20	19.52	15.54	16.99	15.90	17.30	17.62
	3H	18.34	19.63	18.72	19.96	20.32	17.11	18.41	17.49	18.73	19.10
	4H	18.62	19.83	19.02	20.18	20.56	17.71	18.92	18.11	19.27	19.65
	6H	18.77	19.89	19.18	20.26	20.65	18.16	19.27	18.57	19.64	20.03
	8H	18.79	19.86	19.22	20.25	20.65	18.31	19.37	18.73	19.76	20.16
	12H	18.79	19.80	19.22	20.19	20.62	18.40	19.42	18.84	19.80	20.23
4H	2H	17.68	18.90	18.08	19.25	19.63	16.08	17.29	16.48	17.64	18.02
	3H	18.80	19.80	19.21	20.20	20.60	17.85	18.85	18.26	19.25	19.66
	4H	19.19	20.09	19.62	20.50	20.94	18.56	19.46	19.00	19.88	20.32
	6H	19.43	20.21	19.89	20.65	21.11	19.13	19.91	19.59	20.36	20.82
	8H	19.47	20.20	19.94	20.65	21.11	19.33	20.05	19.79	20.50	20.97
	12H	19.48	20.13	19.97	20.61	21.08	19.47	20.11	19.95	20.59	21.06
8H	4H	19.35	20.07	19.81	20.52	20.99	18.77	19.50	19.24	19.95	20.41
	6H	19.66	20.26	20.16	20.75	21.23	19.45	20.05	19.95	20.54	21.02
	8H	19.74	20.27	20.25	20.78	21.27	19.71	20.24	20.22	20.75	21.24
	12H	19.77	20.24	20.28	20.74	21.30	19.91	20.39	20.43	20.88	21.45
12H	4H	19.35	20.00	19.83	20.48	20.95	18.77	19.42	19.25	19.90	20.37
	6H	19.67	20.21	20.19	20.72	21.21	19.46	19.99	19.97	20.51	21.00
	8H	19.79	20.26	20.30	20.76	21.32	19.76	20.23	20.27	20.73	21.30