

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: P1059019

Luminaire Tested: S123RDR-S1000D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
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: S123RDR-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

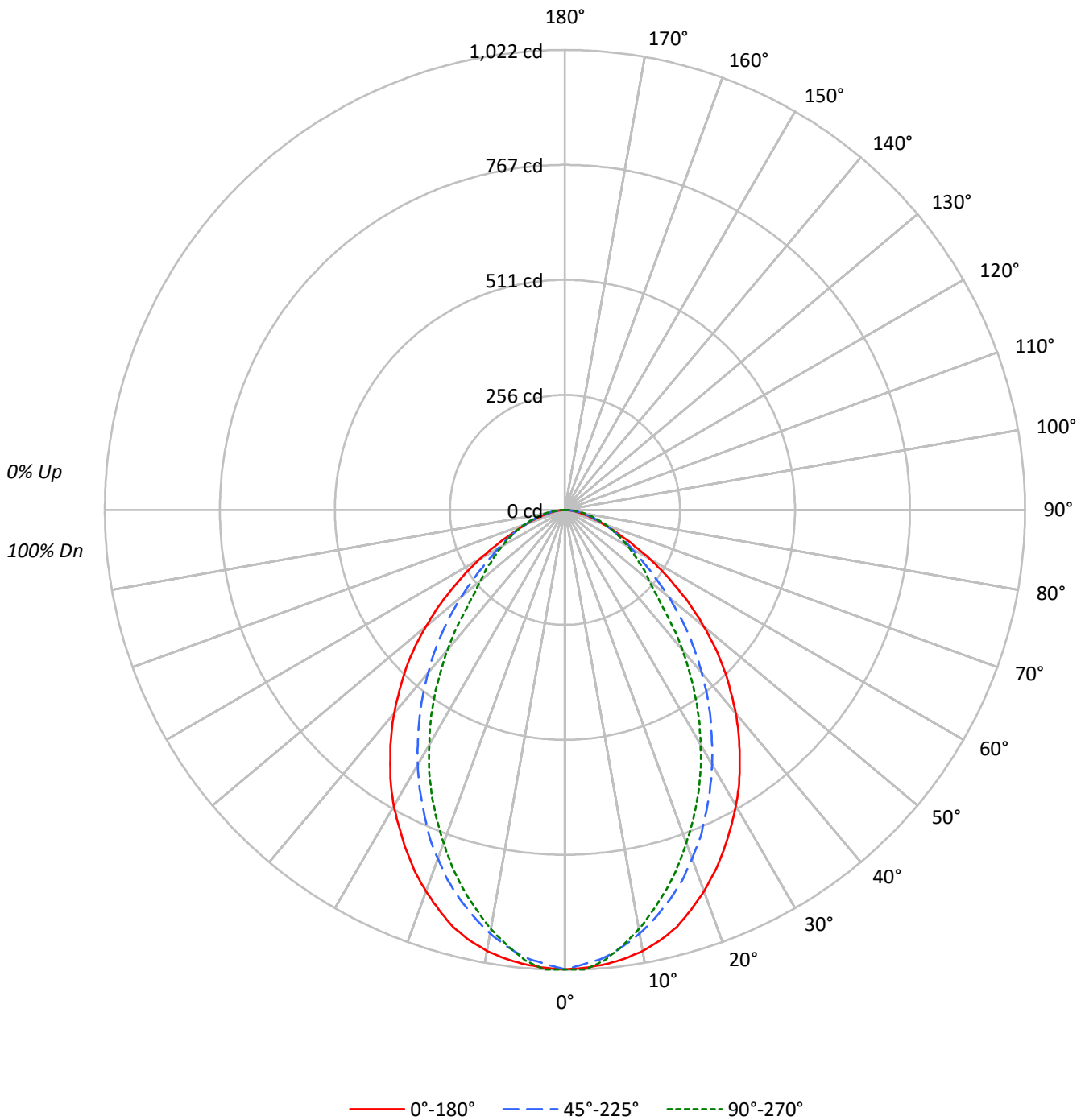
Lumens per Lamp: N/A
Luminaire Lumens: 1786.0 lumens
Efficiency: N/A
Efficacy: 51.0 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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

(END OF REPORT)