

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: P1059177

Luminaire Tested: S123RDR-S340D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059177
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D835-X4F0-XX-UDD-BVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

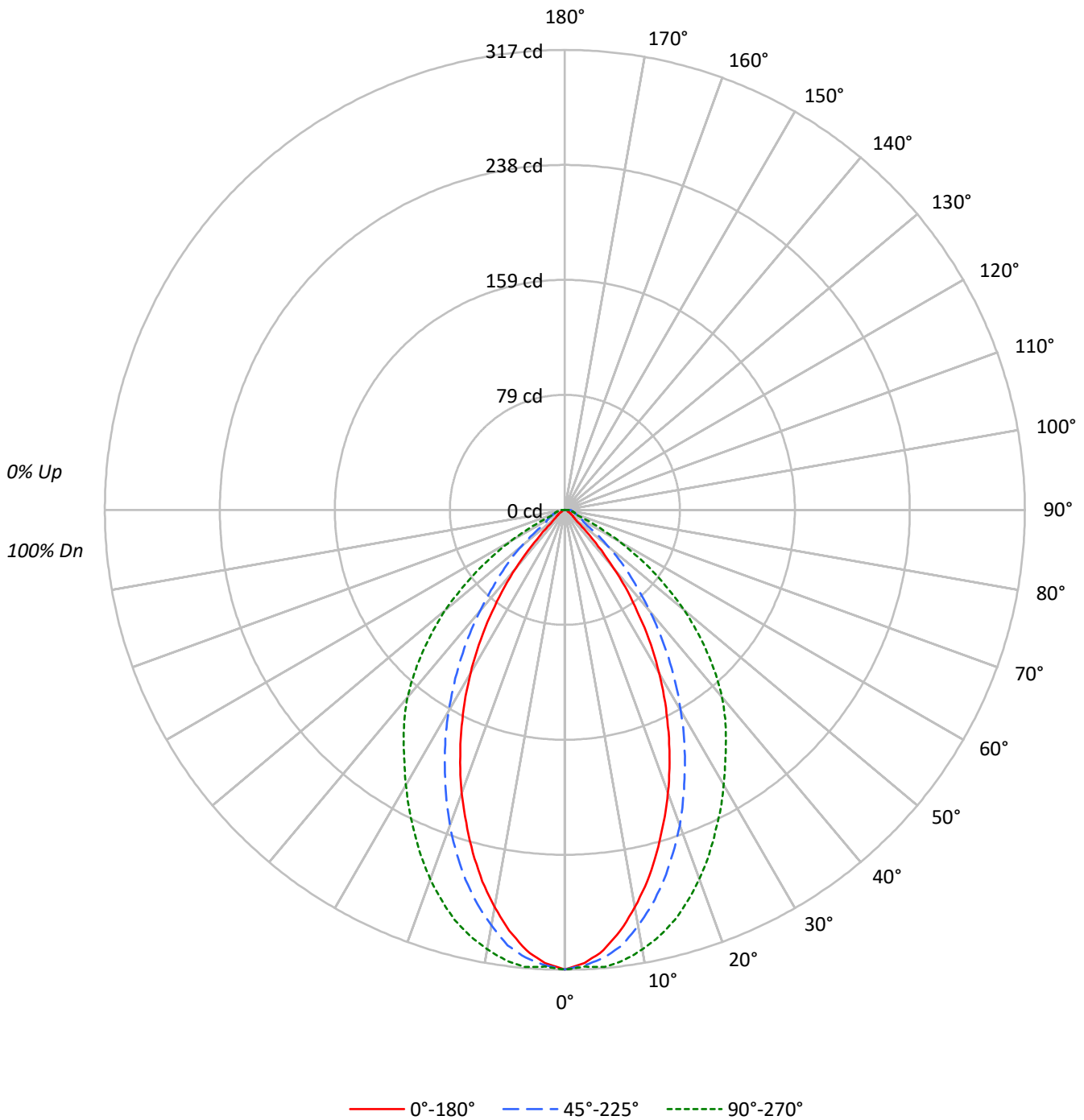
Lumens per Lamp: N/A
Luminaire Lumens: 380.4 lumens
Efficiency: N/A
Efficacy: 30.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	88	94	90	86	91	87	85	88	85	83	81				
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73				
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66				
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55				
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50				
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47				
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	42	40				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3720	3720	3720
5°	3593	3652	3729
10°	3316	3470	3669
15°	2976	3209	3558
20°	2597	2893	3386
25°	2190	2536	3177
30°	1761	2168	2969
35°	1289	1785	2775
40°	805	1392	2584
45°	304	1038	2302
50°	144	714	1962
55°	111	393	1517
60°	78	333	998
65°	58	289	417
70°	58	271	271
75°	77	281	281
80°	115	338	311
85°	229	566	445

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2302 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.1	7.6
10°-20°	74.6	19.6
20°-30°	92.3	24.3
30°-40°	82.8	21.8
40°-50°	54.3	14.3
50°-60°	27.2	7.1
60°-70°	10.6	2.8
70°-80°	6.0	1.6
80°-90°	3.7	1.0
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°	196.0	51.5
0°-40°	278.7	73.3
0°-60°	360.2	94.7
0°-90°	380.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	380.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	317	317	317	317	317	
5°	305	310	310	313	316	28
15°	245	255	264	282	293	68
25°	169	179	196	224	245	77
35°	90	102	124	162	194	56
45°	18	30	62	107	139	17
55°	5	7	19	52	74	5
65°	2	6	10	14	15	2
75°	2	6	6	6	6	2
85°	2	4	4	4	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	316.8	316.8	316.8	316.8	316.8
2.5°	312.7	317.3	314.3	314.8	315.2
5°	304.8	309.8	309.8	313.1	316.4
7.5°	292.7	298.5	302.7	308.5	313.1
10°	278.1	285.2	291.0	301.4	307.7
12.5°	262.3	271.0	278.5	292.3	301.0
15°	244.8	254.8	264.0	281.5	292.7
17.5°	226.1	236.1	248.1	268.5	282.3
20°	207.8	217.7	231.5	254.4	271.0
22.5°	188.6	199.0	213.6	239.0	258.6
25°	169.0	179.4	195.7	223.6	245.2
27.5°	149.5	159.9	178.2	208.6	232.3
30°	129.9	140.3	159.9	192.4	219.0
32.5°	110.3	121.6	142.0	177.4	205.7
35°	89.9	102.0	124.5	162.0	193.6
37.5°	71.2	82.4	107.8	148.6	181.5
40°	52.5	64.5	90.8	135.7	168.6
42.5°	34.1	47.0	75.4	121.6	154.0
45°	18.3	29.6	62.5	107.0	138.6
47.5°	10.0	16.2	50.4	91.6	122.8
50°	7.9	9.2	39.1	78.3	107.4
52.5°	6.7	7.5	27.9	65.8	90.3
55°	5.4	6.7	19.2	52.5	74.1
57.5°	4.6	5.8	15.0	40.8	57.9
60°	3.3	5.0	14.2	30.0	42.5
62.5°	2.5	5.4	12.5	20.8	27.9
65°	2.1	6.2	10.4	13.7	15.0
67.5°	1.7	6.7	9.2	8.7	8.7
70°	1.7	6.2	7.9	7.5	7.9
72.5°	1.7	6.7	7.1	6.7	7.1
75°	1.7	6.2	6.2	6.2	6.2
77.5°	1.7	5.8	5.8	5.4	5.4
80°	1.7	5.0	5.0	5.0	4.6
82.5°	1.7	4.6	4.6	4.6	3.7
85°	1.7	4.2	4.2	4.2	3.3
87.5°	1.2	3.7	4.2	3.7	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)