

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: P1059343

Luminaire Tested: S123RDR-S775D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059343  
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-S775D835-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: -

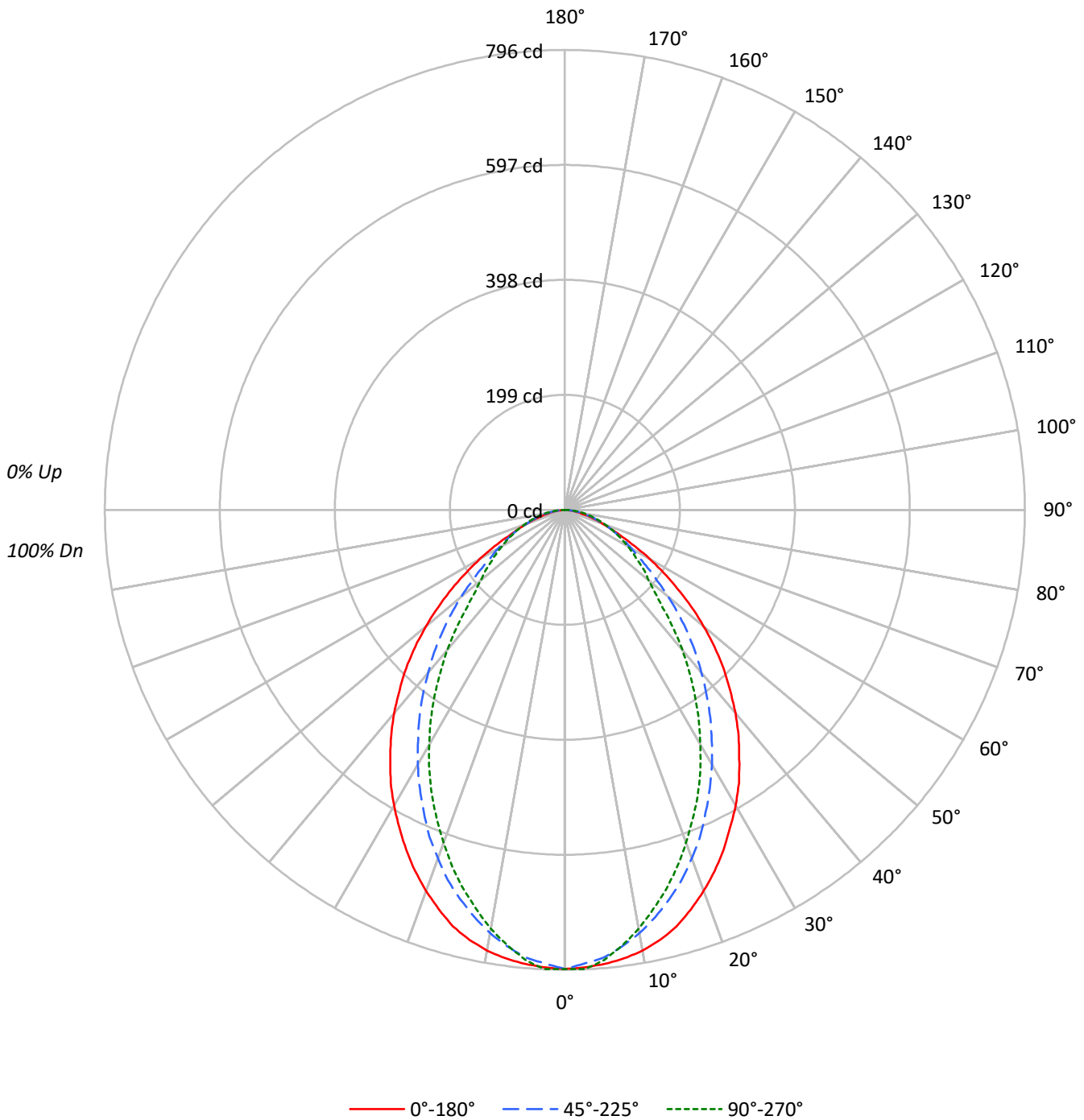
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1389.8 lumens  
Efficiency: N/A  
Efficacy: 53.9 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): 25.8  
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

TEST NUMBER: P1059343

CATALOG NUMBER: S123RDR-S775D835-X4F0-XX-UDD-WVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1059343

CATALOG NUMBER: S123RDR-S775D835-X4F0-XX-UDD-WVL-B

**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			100	
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88			88	
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76			76	
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66			66	
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58			58	
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52			52	
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47			47	
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42			42	
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38			38	
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35			35	
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32			32	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9331	9331	9331
5°	9299	9163	9220
10°	9236	8871	8781
15°	9080	8487	8254
20°	8772	8020	7661
25°	8414	7475	7053
30°	8016	6902	6358
35°	7543	6284	5626
40°	7042	5636	4845
45°	6455	4980	3981
50°	5723	4275	3454
55°	4868	3579	3167
60°	3969	3119	2938
65°	3026	2759	2734
70°	2362	2458	2558
75°	1906	2209	2382
80°	1420	1806	2198
85°	768	1159	1927

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6455 cd/sqm



TEST NUMBER: P1059343

CATALOG NUMBER: S123RDR-S775D835-X4F0-XX-UDD-WVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.8	5.3
10°-20°	198.4	14.3
20°-30°	269.8	19.4
30°-40°	279.7	20.1
40°-50°	235.9	17.0
50°-60°	167.4	12.0
60°-70°	102.3	7.4
70°-80°	50.9	3.7
80°-90°	11.6	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°	542.0	39.0
0°-40°	821.7	59.1
0°-60°	1225.0	88.1
0°-90°	1389.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1389.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	795	795	795	795	795	
5°	789	789	777	782	782	75
15°	747	732	698	686	679	210
25°	649	621	577	556	544	299
35°	526	486	438	408	392	329
45°	389	348	300	259	240	298
55°	238	213	175	160	155	214
65°	109	105	99	99	98	111
75°	42	45	49	51	52	45
85°	6	7	9	12	14	8
90°	0	0	0	0	0	



TEST NUMBER: P1059343

CATALOG NUMBER: S123RDR-S775D835-X4F0-XX-UDD-WVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	794.6	794.6	794.6	794.6	794.6
2.5°	792.7	793.7	786.0	794.6	795.6
5°	788.9	788.9	777.4	782.2	782.2
7.5°	783.2	781.2	762.1	762.1	760.2
10°	774.6	768.8	744.0	739.2	736.4
12.5°	762.1	752.6	722.0	713.4	707.7
15°	746.9	732.5	698.1	685.7	679.0
17.5°	724.9	710.6	672.4	655.2	647.5
20°	702.0	681.0	641.8	624.6	613.1
22.5°	677.1	650.4	612.2	591.2	578.8
25°	649.4	620.8	576.9	555.8	544.4
27.5°	619.8	588.3	543.4	519.6	508.1
30°	591.2	554.9	509.0	482.3	468.9
32.5°	560.6	519.6	472.8	445.1	431.7
35°	526.2	486.1	438.4	407.8	392.5
37.5°	493.8	452.7	403.0	370.6	353.4
40°	459.4	418.3	367.7	334.3	316.1
42.5°	423.1	383.9	334.3	295.1	277.9
45°	388.7	347.6	299.9	258.8	239.7
47.5°	351.5	313.3	266.5	224.4	211.1
50°	313.3	277.9	234.0	195.8	189.1
52.5°	276.0	246.4	201.5	176.7	173.8
55°	237.8	213.0	174.8	159.5	154.7
57.5°	202.5	184.3	149.9	142.3	140.4
60°	169.0	153.8	132.8	128.0	125.1
62.5°	136.6	128.0	115.6	113.7	111.7
65°	108.9	105.1	99.3	99.3	98.4
67.5°	86.0	86.0	85.0	86.9	86.0
70°	68.8	69.7	71.6	73.5	74.5
72.5°	54.4	57.3	59.2	62.1	63.0
75°	42.0	44.9	48.7	50.6	52.5
77.5°	30.6	33.4	37.2	40.1	42.0
80°	21.0	22.9	26.7	30.6	32.5
82.5°	13.4	14.3	17.2	21.0	22.9
85°	5.7	6.7	8.6	12.4	14.3
87.5°	0.0	0.0	1.0	3.8	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)