

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: P1059261

Luminaire Tested: S123RDR-S560D835-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059261  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S560D835-X4F0-XX-UDD-SVL-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

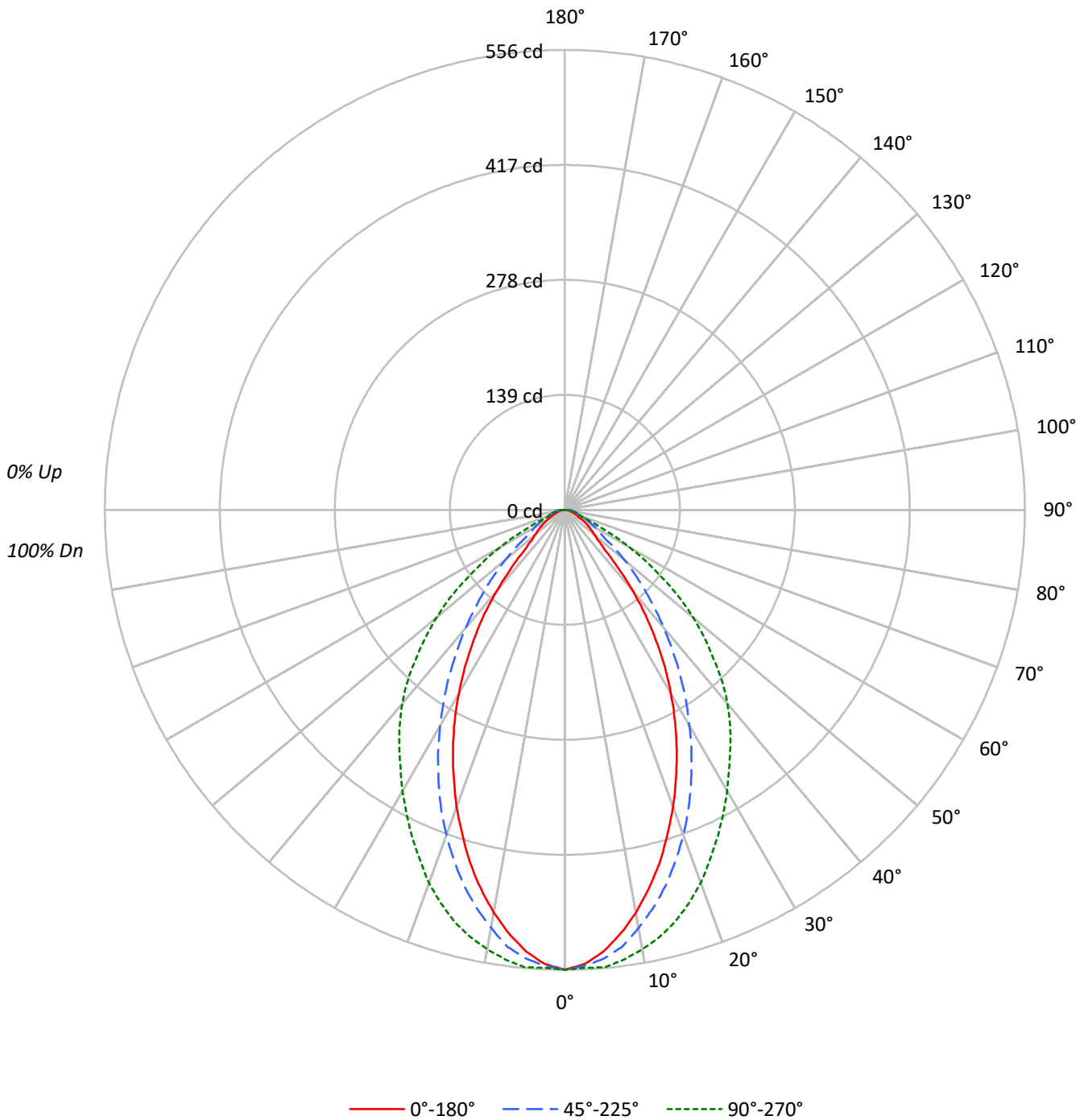
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 746.3 lumens  
Efficiency: N/A  
Efficacy: 38.1 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
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: P1059261

CATALOG NUMBER: S123RDR-S560D835-X4F0-XX-UDD-SVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1059261

CATALOG NUMBER: S123RDR-S560D835-X4F0-XX-UDD-SVL-W

**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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79				
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64				
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58				
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52				
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48				
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44				
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40				
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37				

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

	0°	45°	90°
0°	6528	6528	6528
5°	6317	6415	6544
10°	5896	6118	6432
15°	5373	5717	6263
20°	4781	5230	5998
25°	4142	4680	5655
30°	3474	4083	5319
35°	2752	3475	5000
40°	1948	2859	4689
45°	1147	2258	4220
50°	859	1715	3696
55°	721	1159	2968
60°	585	989	2109
65°	461	845	1114
70°	402	735	687
75°	377	690	658
80°	372	744	656
85°	472	1118	835

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4220 cd/sqm



TEST NUMBER: P1059261

CATALOG NUMBER: S123RDR-S560D835-X4F0-XX-UDD-SVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.2	6.9
10°-20°	133.0	17.8
20°-30°	169.3	22.7
30°-40°	159.3	21.3
40°-50°	114.7	15.4
50°-60°	66.2	8.9
60°-70°	30.3	4.1
70°-80°	15.1	2.0
80°-90°	7.2	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°	353.5	47.4
0°-40°	512.8	68.7
0°-60°	693.7	93.0
0°-90°	746.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	746.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	556	556	556	556	556	
5°	536	545	544	550	555	50
15°	442	458	470	496	515	123
25°	320	336	361	401	436	146
35°	192	209	242	298	349	119
45°	69	86	136	204	254	58
55°	35	37	57	108	145	32
65°	17	24	30	34	40	17
75°	8	16	15	14	14	9
85°	4	8	8	8	6	4
90°	0	0	0	0	0	



TEST NUMBER: P1059261

CATALOG NUMBER: S123RDR-S560D835-X4F0-XX-UDD-SVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	555.9	555.9	555.9	555.9	555.9
2.5°	549.7	556.6	551.8	552.5	553.9
5°	535.9	544.9	544.2	549.7	555.2
7.5°	516.6	526.9	532.5	540.7	548.3
10°	494.5	506.2	513.1	528.3	539.4
12.5°	468.9	484.1	493.1	513.1	529.0
15°	442.0	457.9	470.3	496.5	515.2
17.5°	411.6	428.9	444.7	475.8	498.6
20°	382.6	399.2	418.5	452.3	480.0
22.5°	350.8	368.8	390.9	426.8	457.9
25°	319.7	336.3	361.2	401.2	436.5
27.5°	288.7	305.2	331.5	375.7	414.4
30°	256.2	273.5	301.1	350.1	392.3
32.5°	224.4	241.0	272.1	325.3	369.5
35°	192.0	208.6	242.4	298.3	348.8
37.5°	160.2	177.5	213.4	276.2	328.0
40°	127.1	145.7	186.5	253.5	305.9
42.5°	96.0	116.0	159.5	230.0	281.8
45°	69.1	86.3	136.0	204.4	254.1
47.5°	53.9	62.8	114.6	178.2	228.6
50°	47.0	48.3	93.9	154.0	202.3
52.5°	40.7	42.1	73.9	131.2	174.7
55°	35.2	36.6	56.6	107.7	145.0
57.5°	29.7	31.8	47.0	85.6	116.7
60°	24.9	27.6	42.1	65.6	89.8
62.5°	20.0	24.9	35.9	48.3	64.2
65°	16.6	23.5	30.4	33.8	40.1
67.5°	13.8	21.4	25.6	24.2	23.5
70°	11.7	19.3	21.4	19.3	20.0
72.5°	9.7	18.0	18.0	16.6	16.6
75°	8.3	15.9	15.2	14.5	14.5
77.5°	6.9	13.8	13.1	12.4	11.7
80°	5.5	11.0	11.0	10.4	9.7
82.5°	4.8	9.0	9.0	9.0	7.6
85°	3.5	7.6	8.3	7.6	6.2
87.5°	2.8	6.9	6.9	6.2	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)