

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: P1057801

Luminaire Tested: S122RDR-S1005D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057801
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S1005D835-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

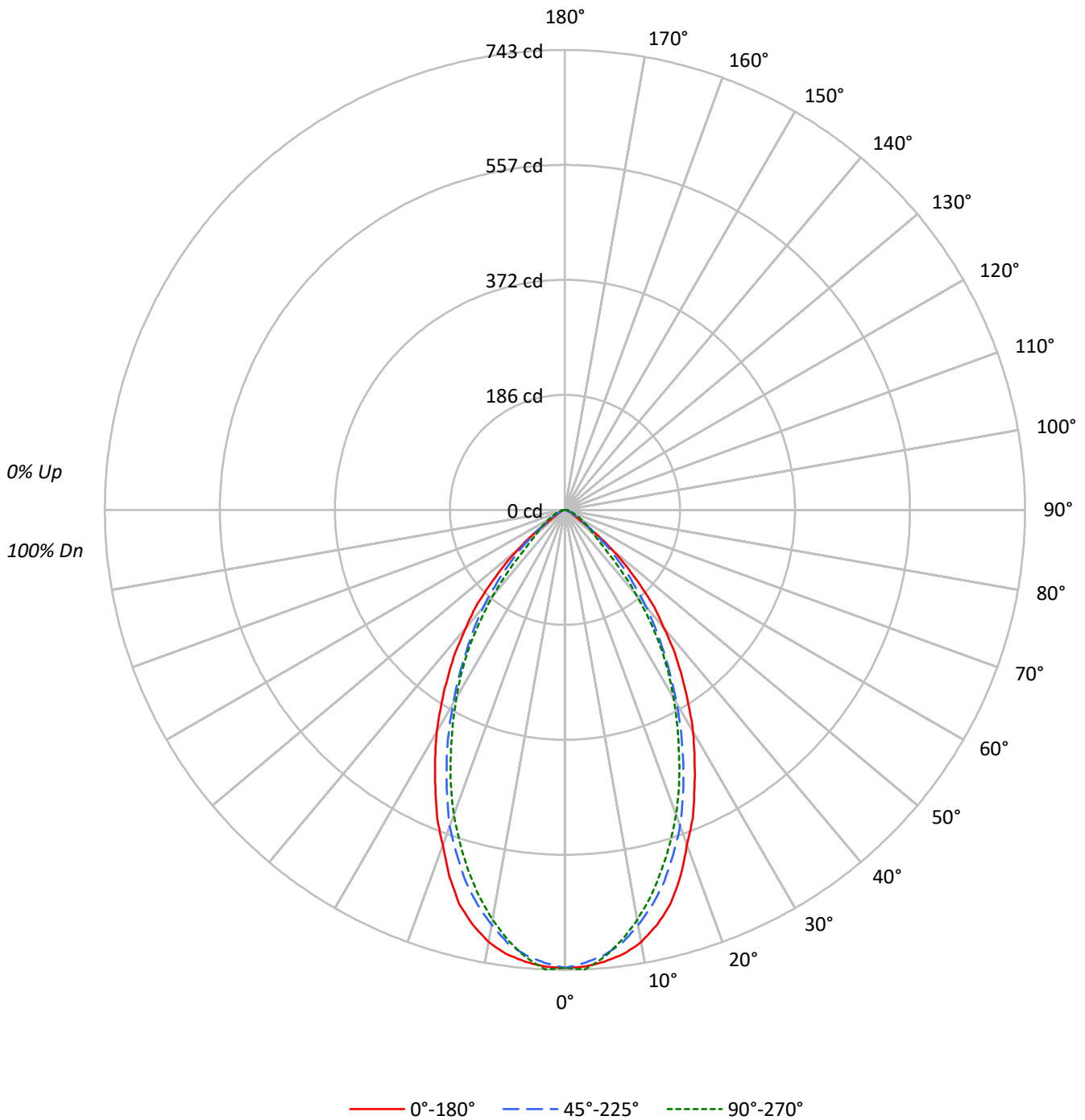
Lumens per Lamp: N/A
Luminaire Lumens: 796.0 lumens
Efficiency: N/A
Efficacy: 19.0 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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: P1057801

CATALOG NUMBER: S122RDR-S1005D835-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1057801

CATALOG NUMBER: S122RDR-S1005D835-X4F0-XX-UDD-SVL-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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92			92	
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84			84	
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76			76	
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70			70	
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64			64	
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59			59	
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54			54	
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50			50	
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47			47	
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44			44	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13657	13657	13657
5°	13572	13381	13437
10°	13286	12760	12595
15°	12587	11854	11514
20°	11315	10676	10297
25°	10076	9205	8873
30°	8813	7681	7460
35°	7420	6224	6024
40°	5979	4912	4341
45°	4473	3546	2583
50°	2799	2291	1697
55°	949	1235	1377
60°	546	764	1089
65°	389	515	838
70°	318	399	637
75°	214	314	528
80°	159	319	468
85°	0	0	318

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4473 cd/sqm



TEST NUMBER: P1057801

CATALOG NUMBER: S122RDR-S1005D835-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.2	8.6
10°-20°	174.6	21.9
20°-30°	210.3	26.4
30°-40°	179.6	22.6
40°-50°	105.3	13.2
50°-60°	38.1	4.8
60°-70°	13.5	1.7
70°-80°	5.4	0.7
80°-90°	1.0	0.1
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°	453.1	56.9
0°-40°	632.8	79.5
0°-60°	776.1	97.5
0°-90°	796.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	796.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	740	740	740	740	740	
5°	733	734	722	725	725	69
15°	659	648	620	609	603	183
25°	495	474	452	445	436	227
35°	329	304	276	273	267	206
45°	171	154	136	114	99	132
55°	30	41	38	40	43	37
65°	9	10	12	16	19	9
75°	3	4	4	6	7	4
85°	0	0	0	2	2	1
90°	0	0	0	0	0	



TEST NUMBER: P1057801

CATALOG NUMBER: S122RDR-S1005D835-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	740.1	740.1	740.1	740.1	740.1
2.5°	738.7	740.1	732.7	740.1	743.1
5°	732.7	734.2	722.4	725.4	725.4
7.5°	723.9	722.4	706.2	703.2	701.7
10°	709.1	704.7	681.0	676.6	672.2
12.5°	686.9	678.1	653.0	645.6	639.7
15°	658.9	648.5	620.5	608.7	602.7
17.5°	620.5	608.7	582.1	570.2	564.3
20°	576.2	564.3	543.7	530.4	524.4
22.5°	539.2	520.0	497.9	489.0	481.6
25°	494.9	474.2	452.1	444.7	435.8
27.5°	453.5	428.4	406.3	400.4	393.0
30°	413.6	387.1	360.5	360.5	350.1
32.5°	370.8	345.7	317.6	316.1	310.2
35°	329.4	304.3	276.3	273.3	267.4
37.5°	291.0	265.9	239.3	230.5	223.1
40°	248.2	226.0	203.9	189.1	180.2
42.5°	214.2	189.1	166.9	149.2	137.4
45°	171.4	153.6	135.9	113.8	99.0
47.5°	133.0	121.1	106.4	81.3	73.9
50°	97.5	91.6	79.8	60.6	59.1
52.5°	62.0	65.0	57.6	47.3	51.7
55°	29.5	41.4	38.4	39.9	42.8
57.5°	19.2	20.7	28.1	32.5	35.5
60°	14.8	14.8	20.7	26.6	29.5
62.5°	11.8	11.8	16.3	22.2	23.6
65°	8.9	10.3	11.8	16.3	19.2
67.5°	7.4	7.4	8.9	13.3	14.8
70°	5.9	5.9	7.4	10.3	11.8
72.5°	4.4	4.4	5.9	8.9	8.9
75°	3.0	4.4	4.4	5.9	7.4
77.5°	3.0	3.0	3.0	4.4	5.9
80°	1.5	1.5	3.0	3.0	4.4
82.5°	1.5	1.5	1.5	1.5	3.0
85°	0.0	0.0	0.0	1.5	1.5
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)