

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: P1057877

Luminaire Tested: S122RDR-S290D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057877
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D830-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

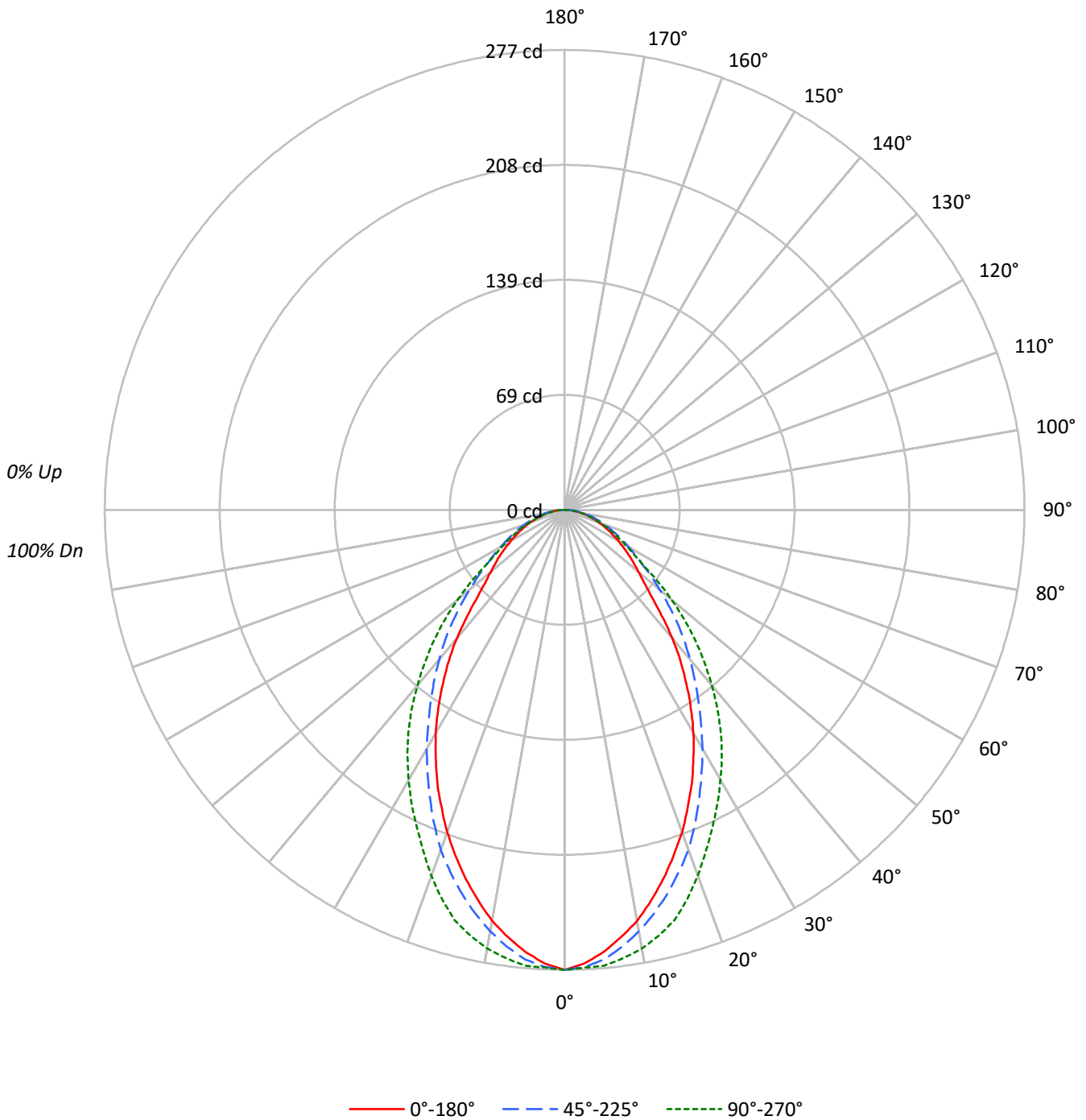
Lumens per Lamp: N/A
Luminaire Lumens: 451.2 lumens
Efficiency: N/A
Efficacy: 36.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66				
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59				
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52				
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47				
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43				
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36				
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5113	5113	5113
5°	4953	5036	5103
10°	4711	4830	5027
15°	4394	4571	4887
20°	4059	4281	4605
25°	3693	3905	4290
30°	3307	3539	4001
35°	2881	3163	3697
40°	2430	2828	3322
45°	1931	2497	2907
50°	1662	2147	2414
55°	1515	1837	1850
60°	1380	1631	1572
65°	1266	1476	1388
70°	1171	1365	1235
75°	1091	1290	1091
80°	1031	1243	988
85°	1016	1270	847

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2907 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.6	5.7
10°-20°	67.6	15.0
20°-30°	89.0	19.7
30°-40°	89.5	19.8
40°-50°	72.5	16.1
50°-60°	50.0	11.1
60°-70°	32.7	7.2
70°-80°	18.2	4.0
80°-90°	6.2	1.4
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°	182.2	40.4
0°-40°	271.7	60.2
0°-60°	394.2	87.4
0°-90°	451.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	451.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	277	277	277	277	277	
5°	267	273	272	273	276	25
15°	230	236	239	248	256	64
25°	181	186	192	200	211	83
35°	128	134	140	153	164	80
45°	74	82	96	104	111	59
55°	47	52	57	58	58	42
65°	29	35	34	32	32	29
75°	15	19	18	16	15	16
85°	5	6	6	5	4	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	277.1	277.1	277.1	277.1	277.1
2.5°	273.5	278.3	275.5	275.5	275.9
5°	267.4	272.7	271.9	273.1	275.5
7.5°	259.8	265.4	265.4	269.1	272.3
10°	251.4	257.0	257.8	263.4	268.3
12.5°	240.9	246.5	248.9	256.2	262.6
15°	230.0	235.7	239.3	248.1	255.8
17.5°	218.4	224.0	228.8	238.1	245.7
20°	206.7	211.9	218.0	226.0	234.5
22.5°	193.8	199.5	205.1	212.8	222.4
25°	181.4	186.2	191.8	200.3	210.7
27.5°	168.1	173.3	178.6	188.6	199.5
30°	155.2	160.5	166.1	176.6	187.8
32.5°	141.6	147.2	152.8	164.5	176.2
35°	127.9	133.9	140.4	152.8	164.1
37.5°	114.6	121.1	128.7	141.6	151.2
40°	100.9	107.8	117.4	128.7	137.9
42.5°	86.5	94.9	106.6	116.2	124.7
45°	74.0	82.4	95.7	104.2	111.4
47.5°	64.8	71.6	84.5	91.7	97.7
50°	57.9	63.1	74.8	80.0	84.1
52.5°	52.3	57.5	65.6	69.2	70.4
55°	47.1	52.3	57.1	58.3	57.5
57.5°	41.8	47.5	50.3	49.1	49.1
60°	37.4	43.4	44.2	42.6	42.6
62.5°	33.0	39.0	39.0	37.0	37.0
65°	29.0	34.6	33.8	32.2	31.8
67.5°	25.3	30.6	29.4	27.8	27.3
70°	21.7	26.5	25.3	23.3	22.9
72.5°	18.5	22.9	21.3	19.7	18.9
75°	15.3	18.9	18.1	16.1	15.3
77.5°	12.5	15.3	14.5	12.9	12.1
80°	9.7	12.1	11.7	10.1	9.3
82.5°	7.2	9.3	8.8	7.6	6.4
85°	4.8	6.4	6.0	5.2	4.0
87.5°	2.4	4.4	4.0	3.6	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)