

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: P1059137

Luminaire Tested: S123RDR-S1165D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059137
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1165D930-X4F0-XX-UDD-WVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

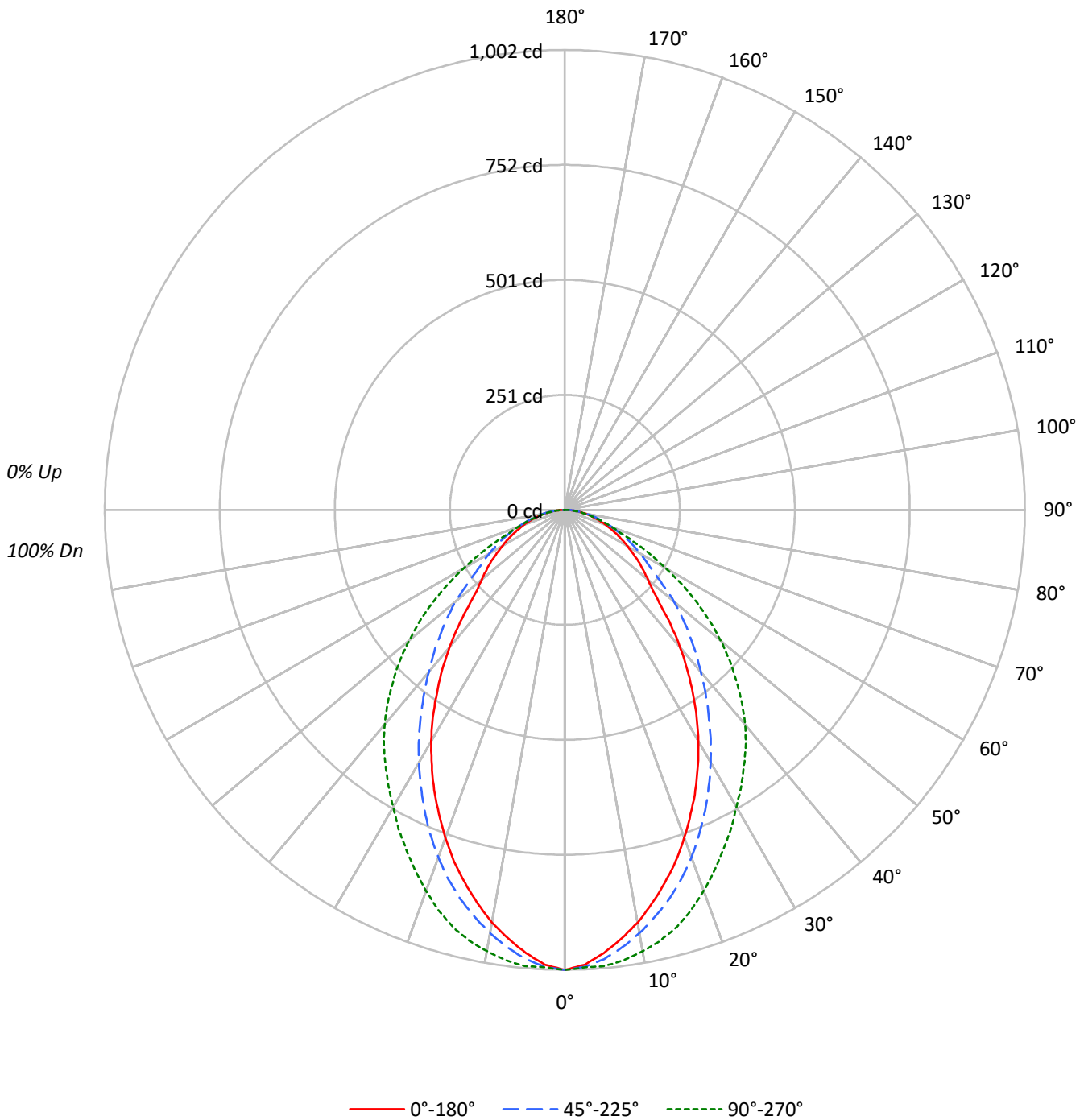
Lumens per Lamp: N/A
Luminaire Lumens: 1810.6 lumens
Efficiency: N/A
Efficacy: 43.3 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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: P1059137

CATALOG NUMBER: S123RDR-S1165D930-X4F0-XX-UDD-WVL-S

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	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57				
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	53	51				
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45				
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41				
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11769	11769	11769
5°	11427	11579	11759
10°	10886	11166	11643
15°	10227	10671	11442
20°	9501	10073	11042
25°	8724	9364	10581
30°	7887	8619	10133
35°	6957	7833	9753
40°	5980	7060	9366
45°	4917	6362	8781
50°	4315	5667	8093
55°	3994	4836	7169
60°	3671	4443	5932
65°	3429	4082	4668
70°	3227	3711	3711
75°	3040	3412	3199
80°	2860	3097	2705
85°	2695	3004	2061

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8781 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.7	5.1
10°-20°	248.5	13.7
20°-30°	336.9	18.6
30°-40°	352.2	19.5
40°-50°	305.5	16.9
50°-60°	227.2	12.6
60°-70°	145.8	8.1
70°-80°	78.2	4.3
80°-90°	23.6	1.3
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°	678.0	37.4
0°-40°	1030.2	56.9
0°-60°	1562.9	86.3
0°-90°	1810.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1810.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1002	1002	1002	1002	1002	
5°	969	986	982	989	998	91
15°	841	861	878	913	941	236
25°	673	694	723	771	817	309
35°	485	509	546	616	680	303
45°	296	318	383	465	529	233
55°	195	200	236	303	350	175
65°	123	134	147	156	168	123
75°	67	78	75	72	70	71
85°	20	25	22	19	15	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1002.3	1002.3	1002.3	1002.3	1002.3
2.5°	991.7	1005.8	996.4	996.4	997.6
5°	969.4	985.9	982.3	989.4	997.6
7.5°	942.4	960.0	961.2	977.6	989.4
10°	913.0	930.6	936.5	960.0	976.5
12.5°	877.8	897.7	908.3	937.7	961.2
15°	841.3	861.3	877.8	913.0	941.2
17.5°	802.6	822.5	843.7	883.6	914.2
20°	760.3	781.4	806.1	846.0	883.6
22.5°	716.8	739.1	765.0	808.4	850.7
25°	673.3	694.5	722.7	770.8	816.7
27.5°	627.5	649.8	679.2	732.1	783.8
30°	581.7	604.0	635.7	692.1	747.3
32.5°	534.6	557.0	591.1	654.5	714.4
35°	485.3	508.8	546.4	615.7	680.4
37.5°	438.3	460.6	502.9	579.3	647.5
40°	390.1	413.6	460.6	542.9	611.0
42.5°	343.1	366.6	421.8	504.1	571.1
45°	296.1	318.4	383.1	465.3	528.8
47.5°	259.7	276.1	346.6	424.2	487.6
50°	236.2	242.1	310.2	384.2	443.0
52.5°	215.0	219.7	270.3	344.3	397.2
55°	195.1	199.8	236.2	303.2	350.2
57.5°	175.1	181.0	210.3	260.9	303.2
60°	156.3	163.3	189.2	223.3	252.6
62.5°	139.8	148.1	168.0	189.2	209.2
65°	123.4	134.0	146.9	156.3	168.0
67.5°	108.1	119.9	126.9	129.3	130.4
70°	94.0	105.8	108.1	108.1	108.1
72.5°	79.9	92.8	90.5	89.3	88.1
75°	67.0	77.6	75.2	71.7	70.5
77.5°	54.1	63.5	59.9	57.6	54.1
80°	42.3	49.4	45.8	43.5	40.0
82.5°	31.7	36.4	32.9	30.6	27.0
85°	20.0	24.7	22.3	18.8	15.3
87.5°	10.6	14.1	11.8	10.6	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)