

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: P1059082

Luminaire Tested: S123RDR-S1000D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059082
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-S1000D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

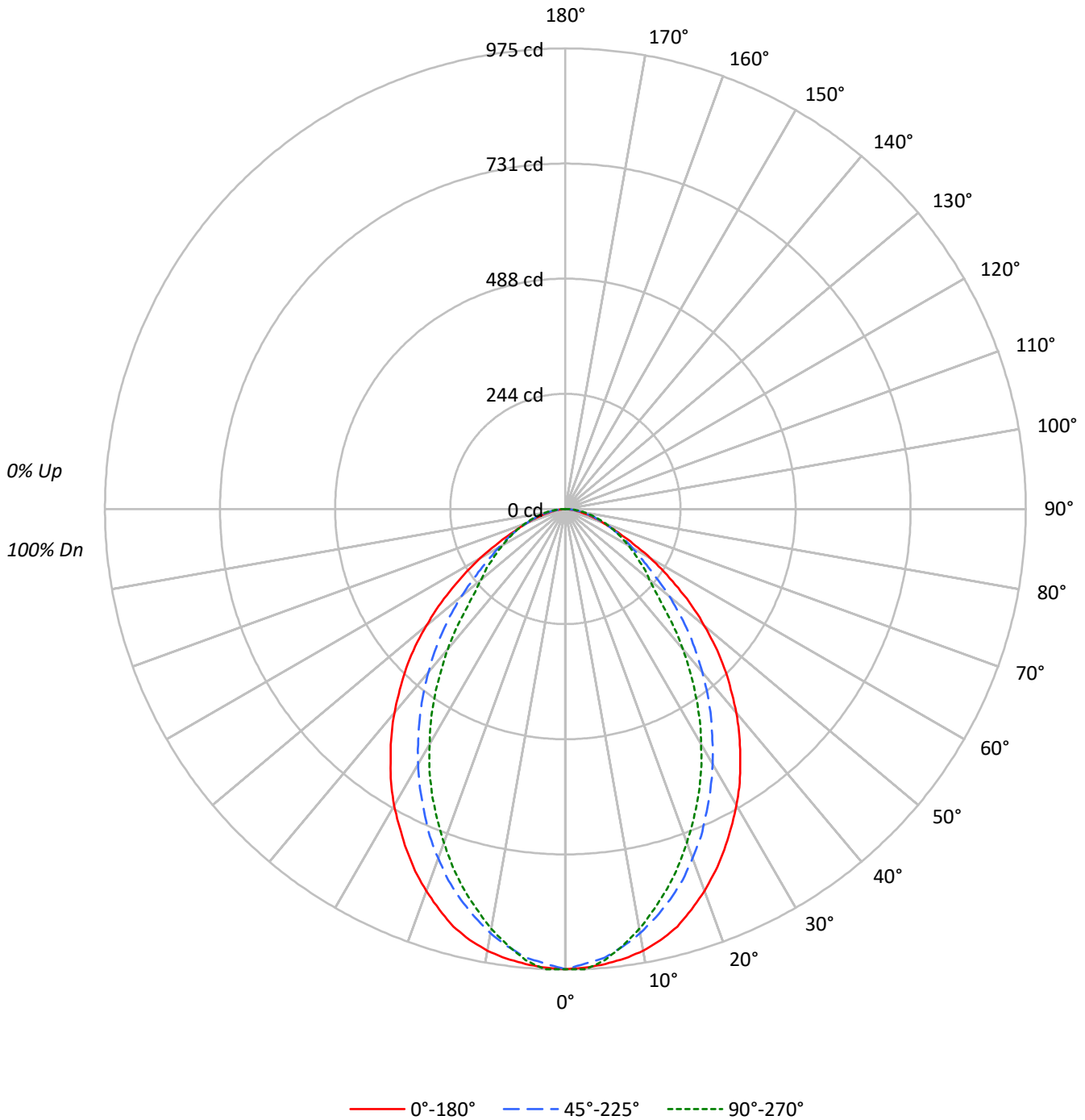
Lumens per Lamp: N/A
Luminaire Lumens: 1703.8 lumens
Efficiency: N/A
Efficacy: 48.7 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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: P1059082

CATALOG NUMBER: S123RDR-S1000D950-X4F0-XX-UDD-WVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1059082

CATALOG NUMBER: S123RDR-S1000D950-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				
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66				
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58				
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52				
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35				
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11439	11439	11439
5°	11399	11234	11303
10°	11323	10875	10763
15°	11131	10405	10120
20°	10754	9832	9393
25°	10316	9163	8647
30°	9828	8462	7795
35°	9247	7704	6898
40°	8633	6910	5941
45°	7913	6104	4881
50°	7015	5241	4235
55°	5968	4387	3884
60°	4866	3821	3603
65°	3709	3384	3351
70°	2894	3014	3135
75°	2337	2709	2922
80°	1745	2218	2691
85°	943	1415	2371

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7913 cd/sqm



TEST NUMBER: P1059082

CATALOG NUMBER: S123RDR-S1000D950-X4F0-XX-UDD-WVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.4	5.3
10°-20°	243.3	14.3
20°-30°	330.7	19.4
30°-40°	342.9	20.1
40°-50°	289.2	17.0
50°-60°	205.3	12.0
60°-70°	125.5	7.4
70°-80°	62.4	3.7
80°-90°	14.2	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°	664.5	39.0
0°-40°	1007.3	59.1
0°-60°	1501.8	88.1
0°-90°	1703.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1703.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	974	974	974	974	974	
5°	967	967	953	959	959	92
15°	916	898	856	841	832	257
25°	796	761	707	681	667	366
35°	645	596	537	500	481	403
45°	476	426	368	317	294	366
55°	292	261	214	196	190	262
65°	134	129	122	122	121	136
75°	52	55	60	62	64	56
85°	7	8	10	15	18	10
90°	0	0	0	0	0	



TEST NUMBER: P1059082

CATALOG NUMBER: S123RDR-S1000D950-X4F0-XX-UDD-WVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	974.2	974.2	974.2	974.2	974.2
2.5°	971.8	973.0	963.6	974.2	975.3
5°	967.1	967.1	953.1	958.9	958.9
7.5°	960.1	957.8	934.3	934.3	932.0
10°	949.6	942.5	912.1	906.2	902.7
12.5°	934.3	922.6	885.2	874.6	867.6
15°	915.6	898.0	855.9	840.7	832.5
17.5°	888.7	871.1	824.3	803.2	793.8
20°	860.6	834.8	786.8	765.7	751.7
22.5°	830.1	797.4	750.5	724.8	709.5
25°	796.2	761.1	707.2	681.4	667.4
27.5°	759.9	721.2	666.2	636.9	622.9
30°	724.8	680.3	624.1	591.3	574.9
32.5°	687.3	636.9	579.6	545.6	529.2
35°	645.1	596.0	537.4	500.0	481.2
37.5°	605.3	555.0	494.1	454.3	433.2
40°	563.2	512.8	450.8	409.8	387.6
42.5°	518.7	470.7	409.8	361.8	340.7
45°	476.5	426.2	367.6	317.3	293.9
47.5°	430.9	384.0	326.7	275.2	258.8
50°	384.0	340.7	286.9	240.0	231.8
52.5°	338.4	302.1	247.1	216.6	213.1
55°	291.5	261.1	214.3	195.5	189.7
57.5°	248.2	226.0	183.8	174.5	172.1
60°	207.2	188.5	162.7	156.9	153.4
62.5°	167.4	156.9	141.7	139.3	137.0
65°	133.5	128.8	121.8	121.8	120.6
67.5°	105.4	105.4	104.2	106.5	105.4
70°	84.3	85.5	87.8	90.2	91.3
72.5°	66.7	70.3	72.6	76.1	77.3
75°	51.5	55.0	59.7	62.1	64.4
77.5°	37.5	41.0	45.7	49.2	51.5
80°	25.8	28.1	32.8	37.5	39.8
82.5°	16.4	17.6	21.1	25.8	28.1
85°	7.0	8.2	10.5	15.2	17.6
87.5°	0.0	0.0	1.2	4.7	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)