

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: P1059334

Luminaire Tested: S123RDR-S775D830-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059334
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-S775D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

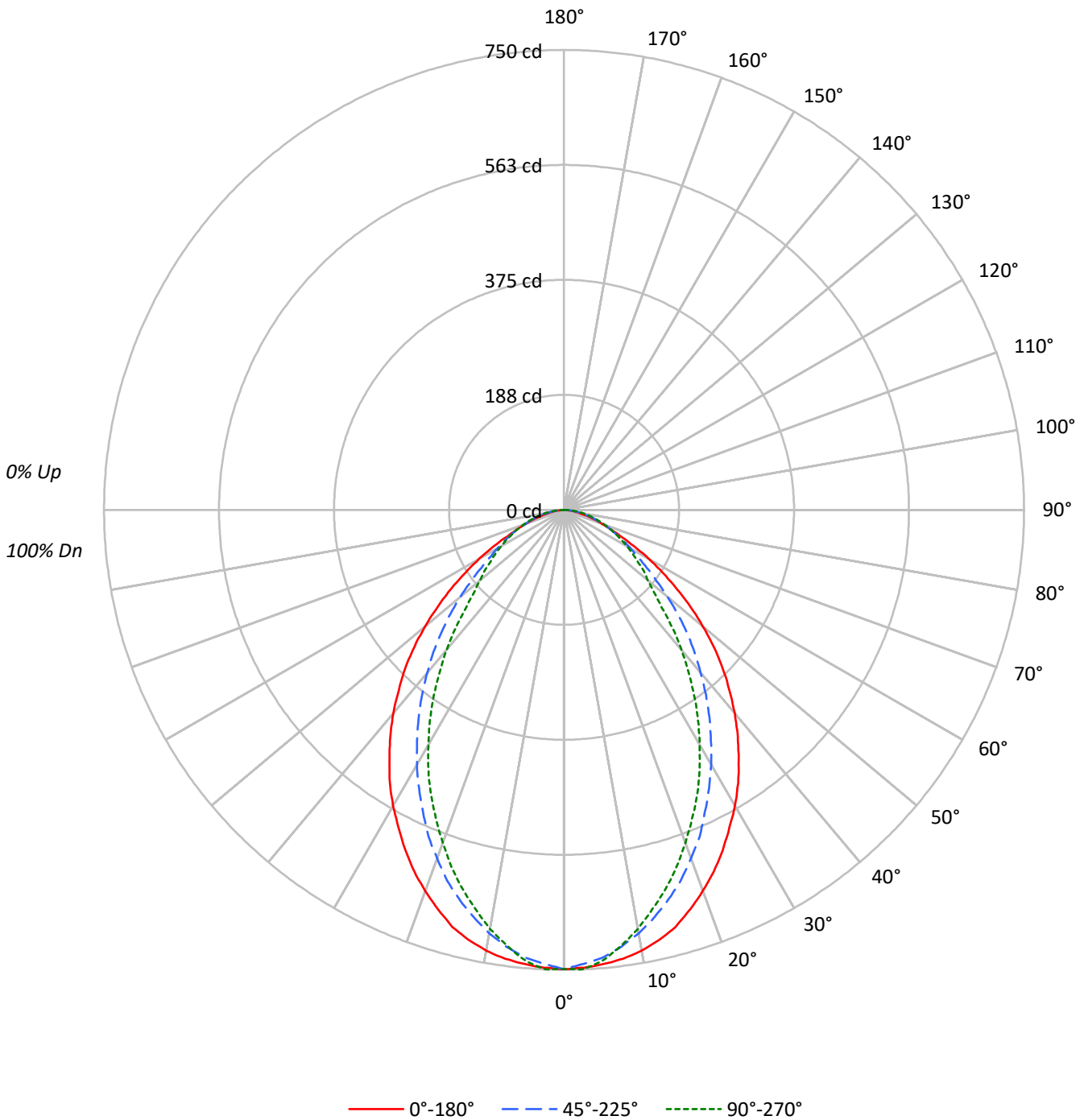
Lumens per Lamp: N/A
Luminaire Lumens: 1309.9 lumens
Efficiency: N/A
Efficacy: 50.8 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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

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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	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°	8795	8795	8795
5°	8765	8638	8691
10°	8705	8361	8275
15°	8557	7999	7780
20°	8267	7559	7221
25°	7931	7044	6648
30°	7555	6506	5993
35°	7110	5923	5304
40°	6637	5313	4568
45°	6085	4695	3751
50°	5395	4028	3255
55°	4588	3372	2985
60°	3741	2938	2769
65°	2851	2601	2576
70°	2225	2317	2410
75°	1797	2082	2246
80°	1339	1704	2069
85°	728	1091	1819

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6085 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.5	5.3
10°-20°	187.0	14.3
20°-30°	254.3	19.4
30°-40°	263.6	20.1
40°-50°	222.3	17.0
50°-60°	157.8	12.0
60°-70°	96.4	7.4
70°-80°	48.0	3.7
80°-90°	10.9	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°	510.8	39.0
0°-40°	774.4	59.1
0°-60°	1154.6	88.1
0°-90°	1309.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1309.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	749	749	749	749	749	
5°	744	744	733	737	737	71
15°	704	690	658	646	640	198
25°	612	585	544	524	513	281
35°	496	458	413	384	370	310
45°	366	328	283	244	226	281
55°	224	201	165	150	146	201
65°	103	99	94	94	93	105
75°	40	42	46	48	50	43
85°	5	6	8	12	14	8
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	749.0	749.0	749.0	749.0	749.0
2.5°	747.2	748.1	740.9	749.0	749.9
5°	743.6	743.6	732.8	737.3	737.3
7.5°	738.2	736.4	718.3	718.3	716.5
10°	730.1	724.6	701.2	696.7	694.0
12.5°	718.3	709.3	680.5	672.4	667.0
15°	703.9	690.4	658.0	646.3	640.0
17.5°	683.2	669.7	633.7	617.5	610.3
20°	661.6	641.8	604.9	588.7	577.9
22.5°	638.2	613.0	577.0	557.2	545.5
25°	612.1	585.1	543.7	523.9	513.1
27.5°	584.2	554.5	512.2	489.7	478.9
30°	557.2	523.0	479.8	454.6	442.0
32.5°	528.4	489.7	445.6	419.5	406.9
35°	496.0	458.2	413.2	384.4	370.0
37.5°	465.4	426.7	379.9	349.3	333.1
40°	433.0	394.3	346.6	315.1	298.0
42.5°	398.8	361.9	315.1	278.2	262.0
45°	366.4	327.7	282.7	244.0	225.9
47.5°	331.3	295.3	251.2	211.5	198.9
50°	295.3	262.0	220.5	184.5	178.2
52.5°	260.2	232.2	189.9	166.5	163.8
55°	224.1	200.7	164.7	150.3	145.8
57.5°	190.8	173.7	141.3	134.1	132.3
60°	159.3	144.9	125.1	120.6	117.9
62.5°	128.7	120.6	108.9	107.1	105.3
65°	102.6	99.0	93.6	93.6	92.7
67.5°	81.0	81.0	80.1	81.9	81.0
70°	64.8	65.7	67.5	69.3	70.2
72.5°	51.3	54.0	55.8	58.5	59.4
75°	39.6	42.3	45.9	47.7	49.5
77.5°	28.8	31.5	35.1	37.8	39.6
80°	19.8	21.6	25.2	28.8	30.6
82.5°	12.6	13.5	16.2	19.8	21.6
85°	5.4	6.3	8.1	11.7	13.5
87.5°	0.0	0.0	0.9	3.6	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)