

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: P1059135

Luminaire Tested: S123RDR-S1165D930-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059135  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S1165D930-X4F0-XX-UDD-SVL-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

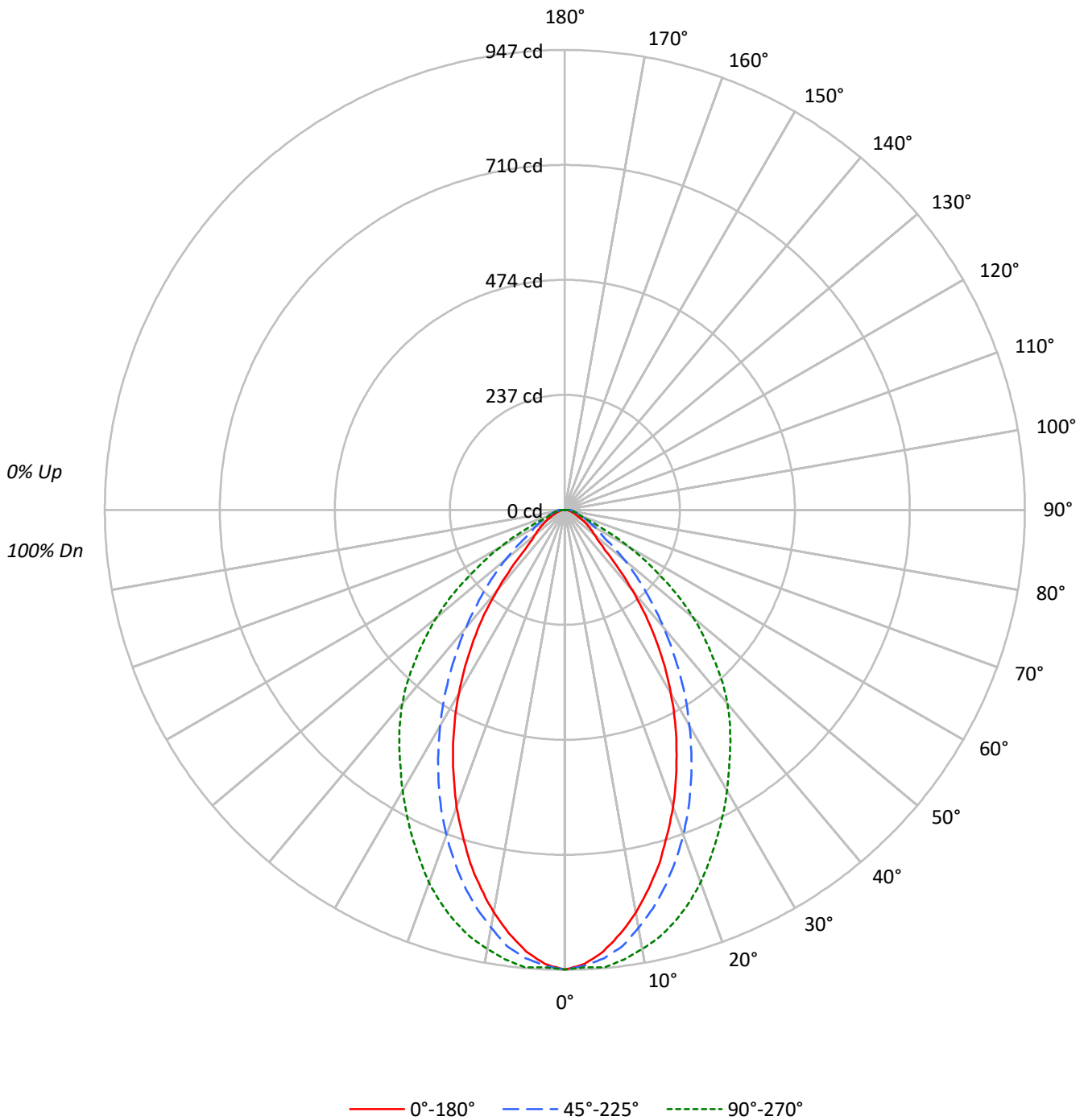
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1270.7 lumens  
Efficiency: N/A  
Efficacy: 30.4 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98  
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

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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				100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79				79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64				64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58				58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52				52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48				48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44				44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40				40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37				37

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	11115	11115	11115
5°	10756	10922	11144
10°	10038	10418	10951
15°	9149	9735	10664
20°	8140	8905	10212
25°	7053	7968	9629
30°	5916	6952	9056
35°	4686	5916	8512
40°	3317	4867	7985
45°	1953	3848	7186
50°	1461	2921	6293
55°	1228	1974	5055
60°	993	1684	3591
65°	784	1436	1895
70°	687	1253	1171
75°	640	1175	1121
80°	636	1271	1116
85°	795	1900	1428

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7186 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.1	6.9
10°-20°	226.4	17.8
20°-30°	288.3	22.7
30°-40°	271.2	21.3
40°-50°	195.3	15.4
50°-60°	112.8	8.9
60°-70°	51.6	4.1
70°-80°	25.8	2.0
80°-90°	12.2	1.0
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°	601.9	47.4
0°-40°	873.1	68.7
0°-60°	1181.2	93.0
0°-90°	1270.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1270.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	947	947	947	947	947	
5°	912	928	927	936	945	85
15°	753	780	801	846	877	210
25°	544	573	615	683	743	249
35°	327	355	413	508	594	203
45°	118	147	232	348	433	99
55°	60	62	96	183	247	54
65°	28	40	52	58	68	29
75°	14	27	26	25	25	15
85°	6	13	14	13	11	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	946.6	946.6	946.6	946.6	946.6
2.5°	936.0	947.8	939.5	940.7	943.1
5°	912.5	927.8	926.6	936.0	945.4
7.5°	879.6	897.2	906.6	920.7	933.7
10°	841.9	861.9	873.7	899.6	918.4
12.5°	798.4	824.3	839.6	873.7	900.7
15°	752.6	779.6	800.8	845.5	877.2
17.5°	700.8	730.2	757.3	810.2	849.0
20°	651.4	679.7	712.6	770.2	817.2
22.5°	597.4	627.9	665.6	726.7	779.6
25°	544.4	572.7	615.0	683.2	743.2
27.5°	491.5	519.7	564.4	639.7	705.5
30°	436.3	465.7	512.7	596.2	667.9
32.5°	382.2	410.4	463.3	553.8	629.1
35°	326.9	355.1	412.7	508.0	593.8
37.5°	272.8	302.2	363.3	470.4	558.5
40°	216.4	248.1	317.5	431.6	520.9
42.5°	163.4	197.5	271.6	391.6	479.8
45°	117.6	147.0	231.7	348.1	432.7
47.5°	91.7	107.0	195.2	303.4	389.2
50°	80.0	82.3	159.9	262.2	344.5
52.5°	69.4	71.7	125.8	223.4	297.5
55°	60.0	62.3	96.4	183.4	246.9
57.5°	50.6	54.1	80.0	145.8	198.7
60°	42.3	47.0	71.7	111.7	152.9
62.5°	34.1	42.3	61.1	82.3	109.4
65°	28.2	40.0	51.7	57.6	68.2
67.5°	23.5	36.5	43.5	41.2	40.0
70°	20.0	32.9	36.5	32.9	34.1
72.5°	16.5	30.6	30.6	28.2	28.2
75°	14.1	27.0	25.9	24.7	24.7
77.5°	11.8	23.5	22.3	21.2	20.0
80°	9.4	18.8	18.8	17.6	16.5
82.5°	8.2	15.3	15.3	15.3	12.9
85°	5.9	12.9	14.1	12.9	10.6
87.5°	4.7	11.8	11.8	10.6	7.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)