

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: P1059336

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059336  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)  
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-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

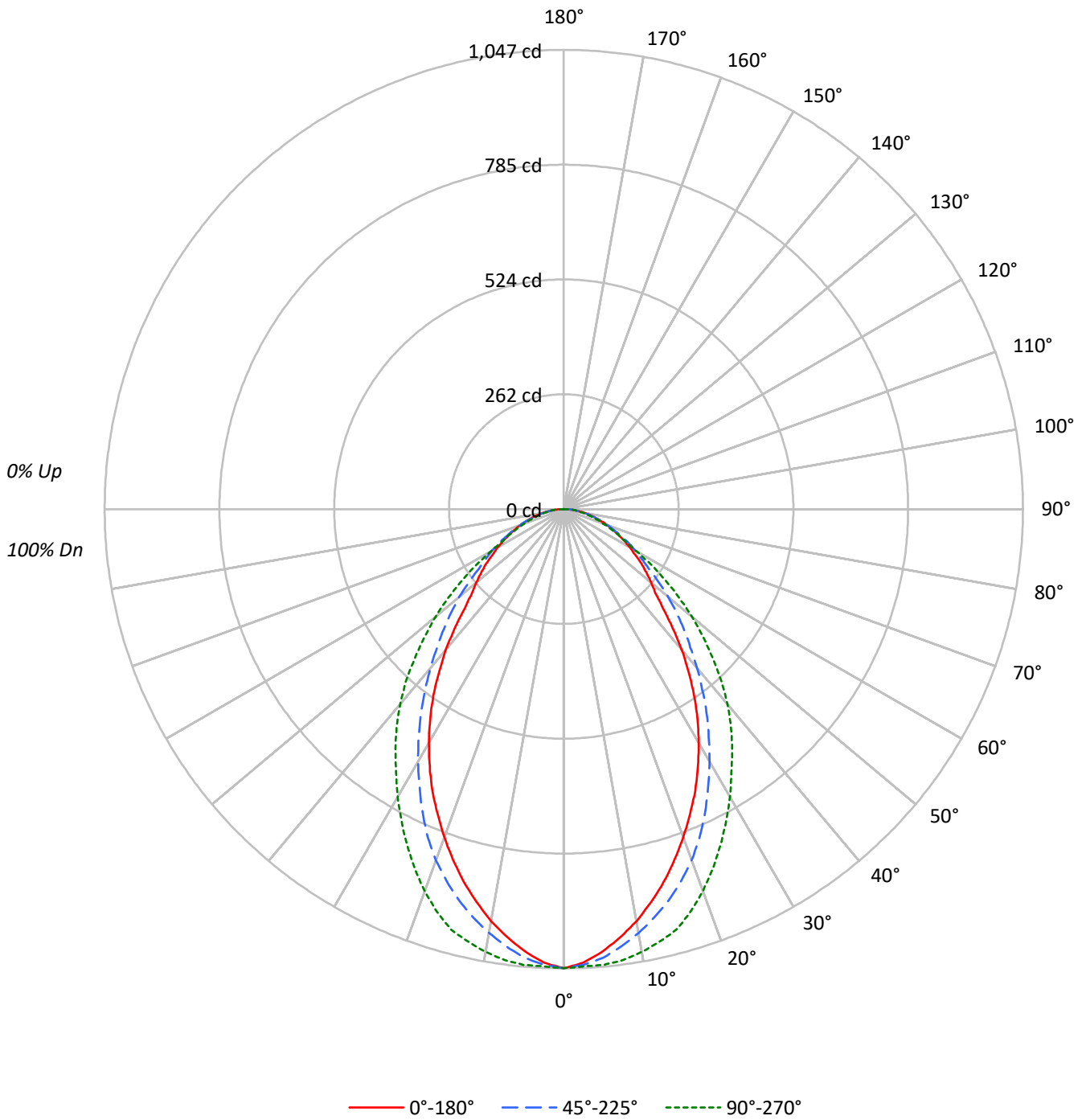
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1839.3 lumens  
Efficiency: N/A  
Efficacy: 71.3 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.1 / 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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32

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

	0°	45°	90°
0°	12291	12291	12291
5°	11935	12104	12295
10°	11374	11697	12223
15°	10699	11224	12068
20°	9951	10649	11583
25°	9185	9874	10948
30°	8341	9014	10272
35°	7425	8135	9594
40°	6407	7249	8892
45°	5296	6417	7973
50°	4755	5661	6960
55°	4408	4831	5773
60°	4063	4401	4422
65°	3779	3979	3704
70°	3557	3619	3248
75°	3353	3230	2863
80°	3165	2921	2678
85°	3031	3274	3031

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7973 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.9	5.3
10°-20°	261.2	14.2
20°-30°	353.3	19.2
30°-40°	363.1	19.7
40°-50°	304.9	16.6
50°-60°	218.6	11.9
60°-70°	139.2	7.6
70°-80°	76.5	4.2
80°-90°	25.5	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°	711.5	38.7
0°-40°	1074.6	58.4
0°-60°	1598.1	86.9
0°-90°	1839.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1839.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1047	1047	1047	1047	1047	
5°	1012	1030	1027	1034	1043	95
15°	880	904	923	963	993	247
25°	709	736	762	804	845	325
35°	518	546	568	618	669	322
45°	319	347	386	442	480	252
55°	215	220	236	268	282	192
65°	136	144	143	135	133	136
75°	74	81	71	66	63	79
85°	22	23	24	25	22	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1046.7	1046.7	1046.7	1046.7	1046.7
2.5°	1035.0	1049.4	1039.5	1040.4	1043.1
5°	1012.5	1030.5	1026.9	1034.1	1043.1
7.5°	984.6	1004.4	1005.3	1022.4	1036.8
10°	953.9	974.7	981.0	1007.1	1025.1
12.5°	917.9	940.4	953.9	986.4	1009.8
15°	880.1	904.4	923.3	963.0	992.7
17.5°	838.6	864.8	889.1	931.4	962.1
20°	796.3	824.2	852.2	891.8	926.9
22.5°	752.2	781.0	809.8	848.6	887.3
25°	708.9	736.0	762.1	803.5	845.0
27.5°	662.1	690.0	712.5	758.5	801.7
30°	615.2	643.2	664.8	712.5	757.6
32.5°	566.6	595.4	615.2	664.8	711.6
35°	518.0	545.9	567.5	617.9	669.3
37.5°	466.6	497.2	518.9	575.6	626.1
40°	418.0	446.8	472.9	532.4	580.1
42.5°	367.5	397.3	427.0	488.2	532.4
45°	318.9	346.8	386.4	442.3	480.1
47.5°	283.8	301.8	347.7	394.6	430.6
50°	260.3	267.5	309.9	351.3	381.0
52.5°	236.9	242.3	271.1	309.0	331.5
55°	215.3	219.8	236.0	267.5	282.0
57.5°	191.9	196.4	209.9	227.9	236.0
60°	173.0	176.6	187.4	190.1	188.3
62.5°	154.0	159.4	164.8	158.5	155.8
65°	136.0	144.1	143.2	135.1	133.3
67.5°	119.8	127.9	123.4	115.3	112.6
70°	103.6	111.7	105.4	97.3	94.6
72.5°	88.3	97.3	87.4	80.2	78.4
75°	73.9	81.1	71.2	65.8	63.1
77.5°	60.4	65.8	56.8	52.2	50.4
80°	46.8	50.4	43.2	40.5	39.6
82.5°	34.2	36.0	31.5	33.3	32.4
85°	22.5	23.4	24.3	25.2	22.5
87.5°	10.8	15.3	15.3	14.4	11.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)