

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 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: S123RDRP-S775D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
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: S123RDRP-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

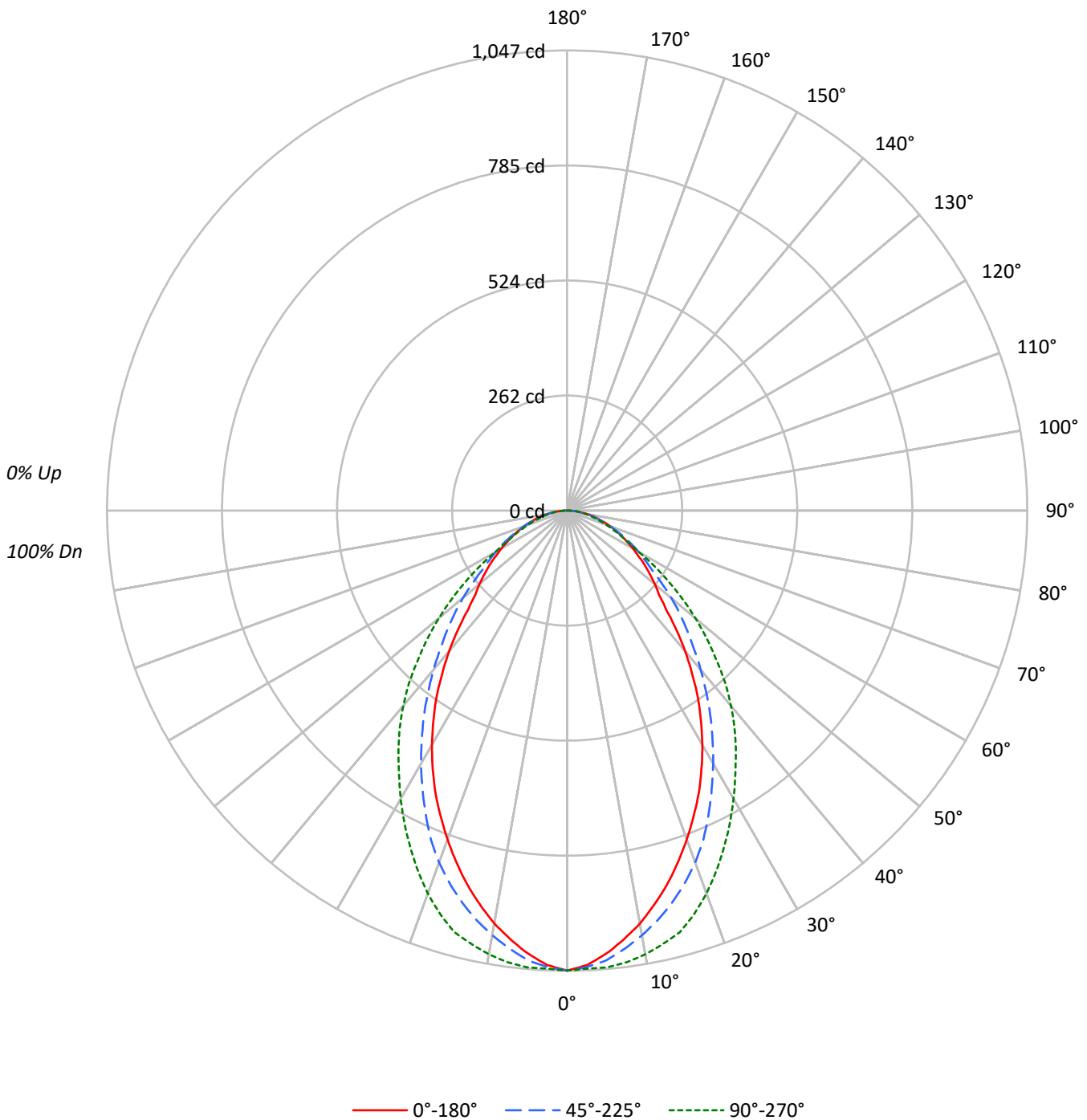
Lumens per Lamp: N/A
Luminaire Lumens: 1839.3 lumens
Efficiency: N/A
Efficacy: 71.3 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (A_{in}): 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	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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87					87			
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75					75			
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66					66			
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58					58			
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51					51			
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46					46			
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41					41			
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38					38			
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34					34			
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32					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

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	15.90	17.37	16.27	17.68	17.99	16.97	18.43	17.34	18.75	19.06
	3H	17.60	18.91	17.98	19.24	19.60	18.06	19.37	18.43	19.69	20.06
	4H	18.25	19.48	18.65	19.83	20.21	18.46	19.69	18.86	20.03	20.41
	6H	18.76	19.89	19.17	20.26	20.65	18.77	19.90	19.18	20.27	20.66
	8H	18.93	20.01	19.36	20.40	20.80	18.90	19.98	19.33	20.37	20.77
	12H	19.05	20.09	19.49	20.47	20.90	19.02	20.05	19.45	20.44	20.87
4H	2H	16.50	17.73	16.90	18.08	18.46	17.37	18.60	17.77	18.95	19.33
	3H	18.43	19.45	18.84	19.85	20.25	18.69	19.71	19.10	20.11	20.51
	4H	19.24	20.16	19.68	20.58	21.02	19.21	20.13	19.65	20.54	20.98
	6H	19.89	20.69	20.35	21.13	21.59	19.64	20.44	20.10	20.88	21.35
	8H	20.11	20.86	20.58	21.30	21.77	19.83	20.58	20.30	21.02	21.49
	12H	20.28	20.95	20.77	21.43	21.90	20.02	20.68	20.50	21.16	21.63
8H	4H	19.48	20.23	19.95	20.67	21.14	19.46	20.20	19.92	20.65	21.12
	6H	20.27	20.88	20.77	21.38	21.85	20.01	20.62	20.50	21.11	21.59
	8H	20.58	21.13	21.10	21.64	22.13	20.28	20.83	20.80	21.34	21.83
	12H	20.85	21.34	21.36	21.83	22.40	20.57	21.06	21.08	21.55	22.12
12H	4H	19.49	20.16	19.98	20.64	21.11	19.48	20.15	19.97	20.63	21.10
	6H	20.30	20.86	20.82	21.37	21.86	20.06	20.61	20.57	21.12	21.61
	8H	20.68	21.17	21.19	21.66	22.22	20.40	20.89	20.91	21.38	21.95