

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: P1059375

Luminaire Tested: S123RDR-S775D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059375
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D930-X4F0-XX-UDD-BVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

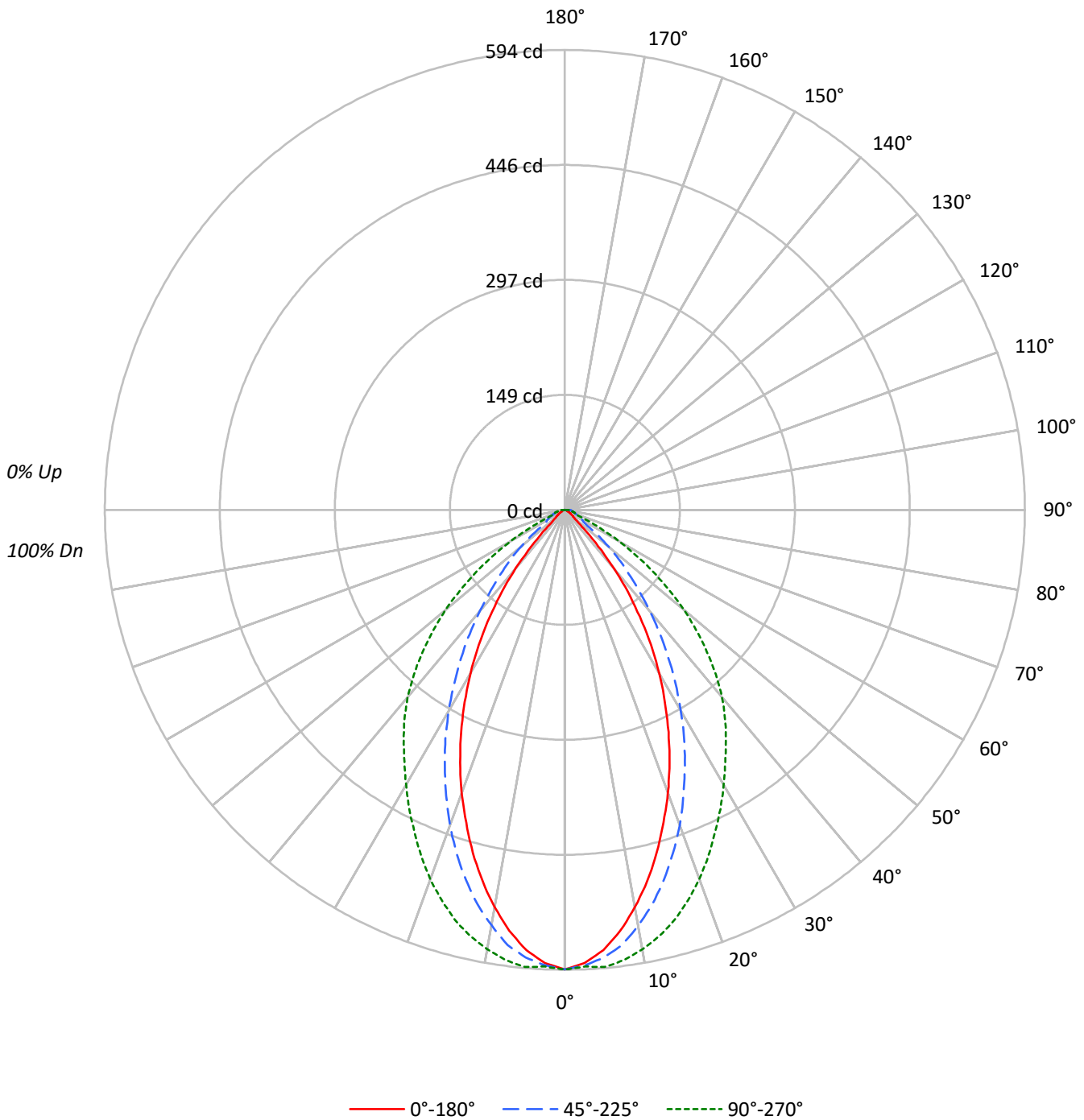
Lumens per Lamp: N/A
Luminaire Lumens: 712.5 lumens
Efficiency: N/A
Efficacy: 27.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81				
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73				
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66				
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55				
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50				
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47				
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	42	40				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6969	6969	6969
5°	6729	6839	6986
10°	6212	6500	6872
15°	5575	6010	6665
20°	4863	5418	6344
25°	4102	4749	5951
30°	3299	4061	5562
35°	2415	3343	5198
40°	1507	2606	4841
45°	570	1943	4313
50°	270	1339	3676
55°	207	735	2842
60°	146	622	1867
65°	108	542	781
70°	106	508	508
75°	141	531	531
80°	210	636	582
85°	418	1051	835

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4313 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.5	7.6
10°-20°	139.7	19.6
20°-30°	172.9	24.3
30°-40°	155.0	21.8
40°-50°	101.6	14.3
50°-60°	50.9	7.1
60°-70°	19.8	2.8
70°-80°	11.2	1.6
80°-90°	6.9	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°	367.1	51.5
0°-40°	522.1	73.3
0°-60°	674.6	94.7
0°-90°	712.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	712.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	594	594	594	594	594	
5°	571	580	580	586	593	53
15°	459	477	494	527	548	128
25°	317	336	366	419	459	145
35°	168	191	233	303	363	105
45°	34	55	117	200	260	33
55°	10	12	36	98	139	9
65°	4	12	20	26	28	4
75°	3	12	12	12	12	3
85°	3	8	8	8	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	593.5	593.5	593.5	593.5	593.5
2.5°	585.7	594.3	588.8	589.6	590.4
5°	570.9	580.2	580.2	586.5	592.7
7.5°	548.3	559.2	567.0	577.9	586.5
10°	521.0	534.2	545.1	564.6	576.3
12.5°	491.3	507.7	521.7	547.5	563.8
15°	458.6	477.3	494.4	527.2	548.3
17.5°	423.5	442.2	464.8	503.0	528.8
20°	389.2	407.9	433.6	476.5	507.7
22.5°	353.3	372.8	400.1	447.6	484.3
25°	316.6	336.1	366.5	418.8	459.3
27.5°	280.0	299.5	333.8	390.7	435.2
30°	243.3	262.8	299.5	360.3	410.2
32.5°	206.7	227.7	265.9	332.2	385.3
35°	168.5	191.1	233.2	303.4	362.6
37.5°	133.4	154.4	202.0	278.4	340.0
40°	98.3	120.9	170.0	254.2	315.8
42.5°	63.9	88.1	141.2	227.7	288.6
45°	34.3	55.4	117.0	200.4	259.7
47.5°	18.7	30.4	94.4	171.6	230.1
50°	14.8	17.2	73.3	146.6	201.2
52.5°	12.5	14.0	52.3	123.2	169.2
55°	10.1	12.5	35.9	98.3	138.8
57.5°	8.6	10.9	28.1	76.4	108.4
60°	6.2	9.4	26.5	56.2	79.5
62.5°	4.7	10.1	23.4	39.0	52.3
65°	3.9	11.7	19.5	25.7	28.1
67.5°	3.1	12.5	17.2	16.4	16.4
70°	3.1	11.7	14.8	14.0	14.8
72.5°	3.1	12.5	13.3	12.5	13.3
75°	3.1	11.7	11.7	11.7	11.7
77.5°	3.1	10.9	10.9	10.1	10.1
80°	3.1	9.4	9.4	9.4	8.6
82.5°	3.1	8.6	8.6	8.6	7.0
85°	3.1	7.8	7.8	7.8	6.2
87.5°	2.3	7.0	7.8	7.0	4.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)