

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: P1059363

Luminaire Tested: S123RDR-S775D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059363
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-S775D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

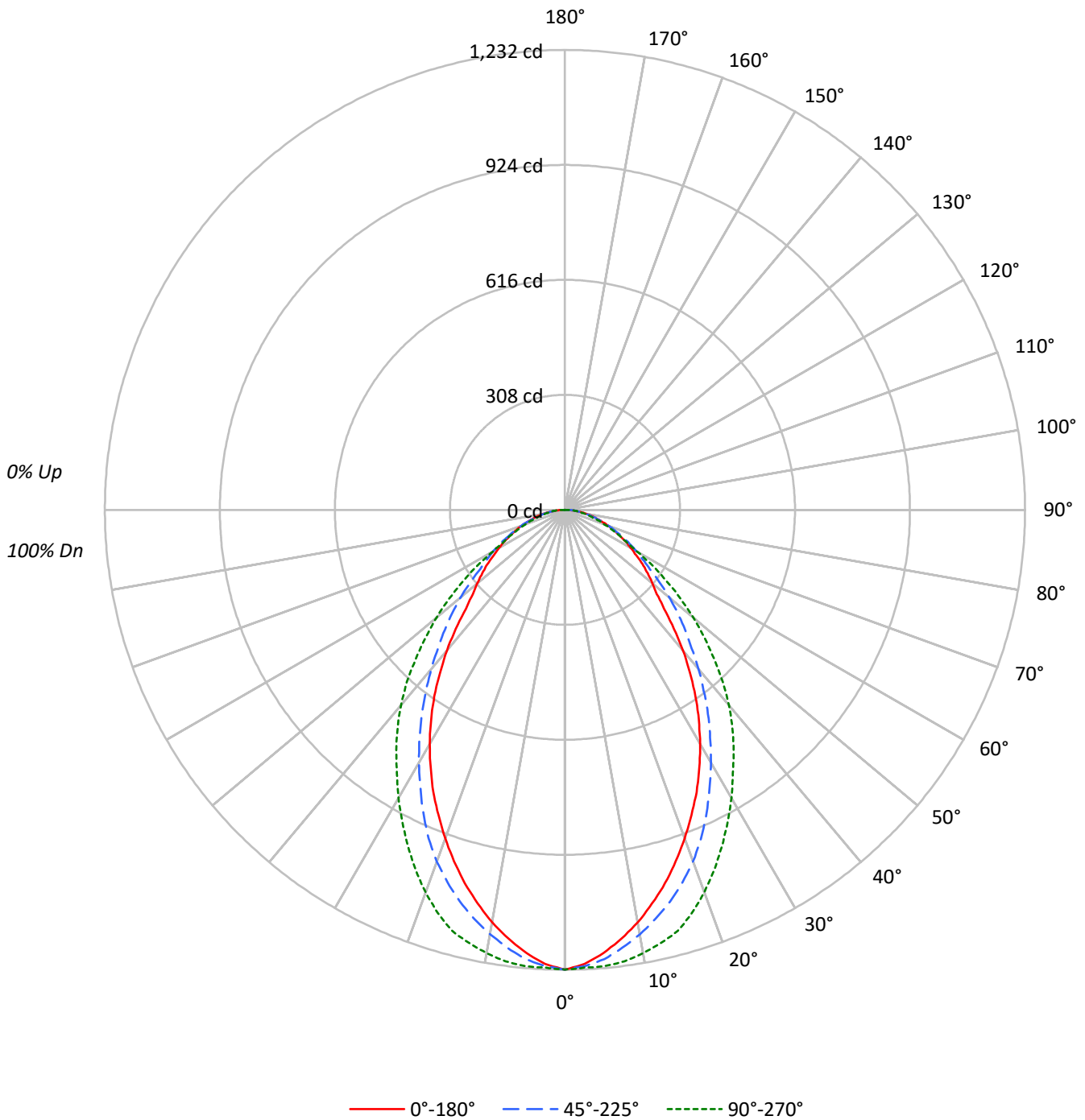
Lumens per Lamp: N/A
Luminaire Lumens: 2164.2 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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°	14462	14462	14462
5°	14042	14243	14467
10°	13383	13762	14382
15°	12588	13207	14199
20°	11708	12530	13628
25°	10807	11618	12881
30°	9815	10606	12086
35°	8736	9571	11289
40°	7539	8529	10463
45°	6231	7551	9381
50°	5595	6661	8190
55°	5186	5685	6791
60°	4779	5178	5202
65°	4446	4682	4359
70°	4185	4257	3821
75°	3943	3797	3366
80°	3726	3442	3151
85°	3570	3853	3570

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9381 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.1	5.3
10°-20°	307.3	14.2
20°-30°	415.7	19.2
30°-40°	427.2	19.7
40°-50°	358.8	16.6
50°-60°	257.2	11.9
60°-70°	163.8	7.6
70°-80°	90.0	4.2
80°-90°	30.0	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°	837.1	38.7
0°-40°	1264.3	58.4
0°-60°	1880.4	86.9
0°-90°	2164.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2164.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1191	1212	1208	1217	1227	112
15°	1036	1064	1086	1133	1168	290
25°	834	866	897	945	994	382
35°	609	642	668	727	788	379
45°	375	408	455	520	565	296
55°	253	259	278	315	332	226
65°	160	170	168	159	157	160
75°	87	95	84	77	74	92
85°	26	28	29	30	26	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1231.6	1231.6	1231.6	1231.6	1231.6
2.5°	1217.8	1234.8	1223.1	1224.2	1227.3
5°	1191.3	1212.5	1208.3	1216.7	1227.3
7.5°	1158.5	1181.8	1182.8	1203.0	1219.9
10°	1122.4	1146.8	1154.2	1185.0	1206.2
12.5°	1080.0	1106.5	1122.4	1160.6	1188.1
15°	1035.5	1064.1	1086.4	1133.0	1168.0
17.5°	986.8	1017.5	1046.1	1095.9	1132.0
20°	936.9	969.8	1002.7	1049.3	1090.6
22.5°	885.0	918.9	952.8	998.4	1044.0
25°	834.1	865.9	896.7	945.4	994.2
27.5°	779.0	811.9	838.4	892.4	943.3
30°	723.9	756.8	782.2	838.4	891.4
32.5°	666.7	700.6	723.9	782.2	837.3
35°	609.4	642.3	667.7	727.1	787.5
37.5°	549.0	585.1	610.5	677.3	736.6
40°	491.8	525.7	556.4	626.4	682.6
42.5°	432.4	467.4	502.4	574.5	626.4
45°	375.2	408.1	454.7	520.4	564.9
47.5°	333.9	355.1	409.1	464.2	506.6
50°	306.3	314.8	364.6	413.4	448.3
52.5°	278.8	285.1	319.0	363.5	390.0
55°	253.3	258.6	277.7	314.8	331.7
57.5°	225.8	231.1	247.0	268.2	277.7
60°	203.5	207.7	220.5	223.6	221.5
62.5°	181.2	187.6	194.0	186.5	183.4
65°	160.0	169.6	168.5	159.0	156.9
67.5°	141.0	150.5	145.2	135.7	132.5
70°	121.9	131.4	124.0	114.5	111.3
72.5°	103.9	114.5	102.8	94.3	92.2
75°	86.9	95.4	83.7	77.4	74.2
77.5°	71.0	77.4	66.8	61.5	59.4
80°	55.1	59.4	50.9	47.7	46.6
82.5°	40.3	42.4	37.1	39.2	38.2
85°	26.5	27.6	28.6	29.7	26.5
87.5°	12.7	18.0	18.0	17.0	13.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)