

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: P1059353

Luminaire Tested: S123RDR-S775D840-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059353
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D840-X4F0-XX-UDD-WVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

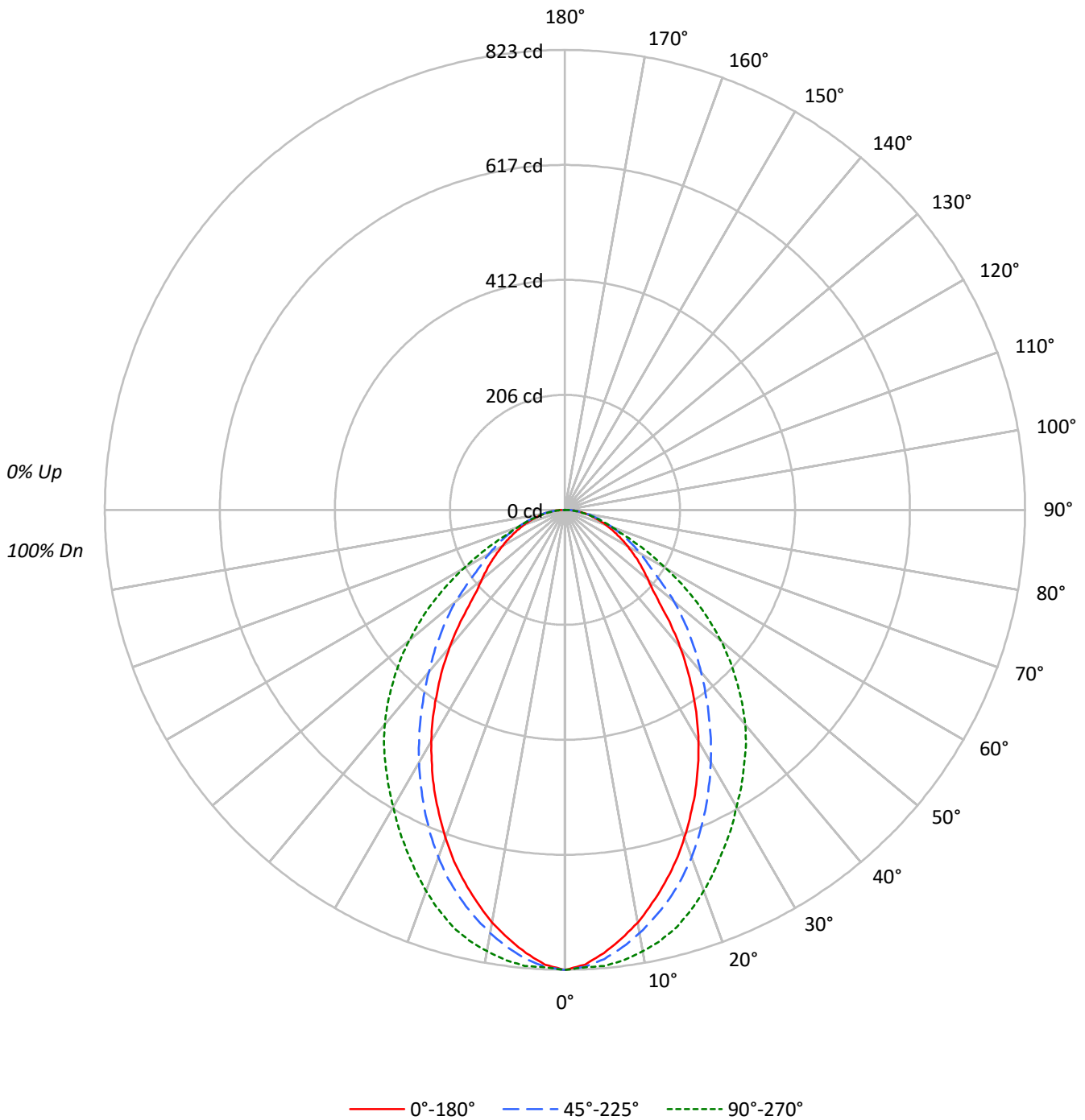
Lumens per Lamp: N/A
Luminaire Lumens: 1487.0 lumens
Efficiency: N/A
Efficacy: 57.6 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57				
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51				
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45				
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41				
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9666	9666	9666
5°	9385	9510	9657
10°	8941	9172	9563
15°	8400	8764	9397
20°	7803	8272	9068
25°	7165	7690	8690
30°	6477	7079	8323
35°	5714	6433	8010
40°	4911	5799	7692
45°	4039	5224	7212
50°	3544	4655	6646
55°	3280	3972	5888
60°	3015	3650	4873
65°	2815	3351	3834
70°	2650	3049	3049
75°	2495	2804	2627
80°	2346	2543	2218
85°	2210	2466	1684

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7212 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.1	5.1
10°-20°	204.1	13.7
20°-30°	276.7	18.6
30°-40°	289.3	19.5
40°-50°	250.9	16.9
50°-60°	186.6	12.6
60°-70°	119.8	8.1
70°-80°	64.2	4.3
80°-90°	19.4	1.3
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°	556.9	37.4
0°-40°	846.1	56.9
0°-60°	1283.6	86.3
0°-90°	1487.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1487.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	823	823	823	823	823	
5°	796	810	807	813	819	75
15°	691	707	721	750	773	194
25°	553	570	594	633	671	254
35°	399	418	449	506	559	249
45°	243	262	315	382	434	191
55°	160	164	194	249	288	143
65°	101	110	121	128	138	101
75°	55	64	62	59	58	58
85°	16	20	18	15	12	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	823.2	823.2	823.2	823.2	823.2
2.5°	814.5	826.1	818.4	818.4	819.3
5°	796.2	809.7	806.8	812.6	819.3
7.5°	774.0	788.5	789.4	802.9	812.6
10°	749.9	764.3	769.2	788.5	802.0
12.5°	720.9	737.3	746.0	770.1	789.4
15°	691.0	707.4	720.9	749.9	773.0
17.5°	659.1	675.5	692.9	725.7	750.8
20°	624.4	641.8	662.0	694.8	725.7
22.5°	588.7	607.0	628.3	664.0	698.7
25°	553.0	570.4	593.5	633.1	670.7
27.5°	515.3	533.7	557.8	601.2	643.7
30°	477.7	496.0	522.1	568.4	613.8
32.5°	439.1	457.4	485.4	537.5	586.8
35°	398.6	417.9	448.8	505.7	558.8
37.5°	360.0	378.3	413.0	475.8	531.8
40°	320.4	339.7	378.3	445.9	501.8
42.5°	281.8	301.1	346.5	414.0	469.0
45°	243.2	261.5	314.6	382.2	434.3
47.5°	213.3	226.8	284.7	348.4	400.5
50°	194.0	198.8	254.8	315.6	363.8
52.5°	176.6	180.5	222.0	282.8	326.2
55°	160.2	164.1	194.0	249.0	287.6
57.5°	143.8	148.6	172.7	214.2	249.0
60°	128.4	134.1	155.4	183.4	207.5
62.5°	114.8	121.6	138.0	155.4	171.8
65°	101.3	110.0	120.6	128.4	138.0
67.5°	88.8	98.4	104.2	106.2	107.1
70°	77.2	86.9	88.8	88.8	88.8
72.5°	65.6	76.2	74.3	73.3	72.4
75°	55.0	63.7	61.8	58.9	57.9
77.5°	44.4	52.1	49.2	47.3	44.4
80°	34.7	40.5	37.6	35.7	32.8
82.5°	26.1	29.9	27.0	25.1	22.2
85°	16.4	20.3	18.3	15.4	12.5
87.5°	8.7	11.6	9.7	8.7	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)