

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: P1060559

Luminaire Tested: S124RDR-S795D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

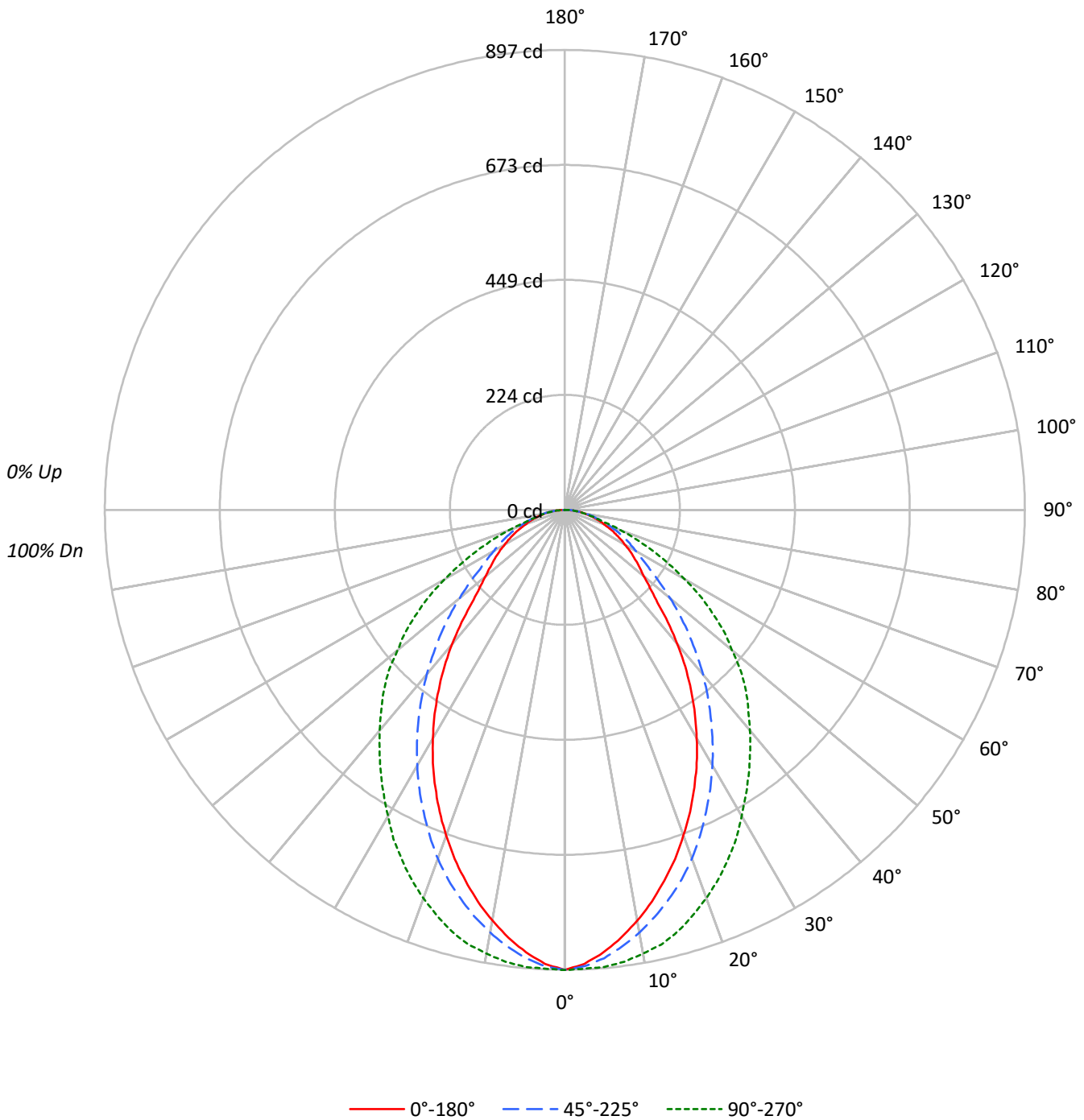
Test Method: LM-79-2019  
Report Number: P1060559  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S795D835-X4F0-XX-UDD-WVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1633.8 lumens  
Efficiency: N/A  
Efficacy: 63.3 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1  
Luminous Opening: Rectangular (W 0.31' 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									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	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	79	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	65	59	54	64	58	53	62	57	52	50																												
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45																												
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41																												
8	65	53	45	39	64	52	44	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	35	45	39	35	34																												
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31																												

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

	0°	45°	90°
0°	7728	7728	7728
5°	7489	7587	7733
10°	7115	7320	7682
15°	6675	7003	7589
20°	6197	6637	7388
25°	5675	6185	7150
30°	5117	5724	6856
35°	4509	5221	6576
40°	3839	4705	6313
45°	3116	4159	6083
50°	2697	3580	5696
55°	2500	3036	5282
60°	2334	2738	4633
65°	2184	2569	3853
70°	2037	2369	2913
75°	1940	2189	2096
80°	1820	2003	1770
85°	1670	1857	1393

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6083 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.9	5.1
10°-20°	222.7	13.6
20°-30°	304.1	18.6
30°-40°	318.6	19.5
40°-50°	275.8	16.9
50°-60°	207.2	12.7
60°-70°	133.6	8.2
70°-80°	68.5	4.2
80°-90°	20.5	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°	609.7	37.3
0°-40°	928.2	56.8
0°-60°	1411.2	86.4
0°-90°	1633.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1633.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	866	880	878	884	895	81
15°	749	768	786	821	851	210
25°	597	620	651	702	752	274
35°	429	453	497	562	626	267
45°	256	282	342	425	500	202
55°	166	172	202	289	352	150
65°	107	109	126	152	189	107
75°	58	65	66	65	63	62
85°	17	20	19	18	14	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	897.4	897.4	897.4	897.4	897.4
2.5°	886.1	897.4	890.8	892.7	895.5
5°	866.4	879.5	877.7	884.2	894.6
7.5°	841.9	856.0	858.8	873.9	888.9
10°	813.7	829.7	837.2	859.8	878.6
12.5°	782.6	799.6	812.7	841.0	868.2
15°	748.8	767.6	785.5	821.2	851.3
17.5°	714.0	732.8	756.3	795.8	829.7
20°	676.3	697.0	724.3	765.7	806.2
22.5°	637.8	659.4	688.6	733.7	780.8
25°	597.3	619.9	651.0	701.7	752.5
27.5°	556.9	579.5	614.3	667.9	723.4
30°	514.6	538.1	575.7	634.0	689.5
32.5°	472.2	497.6	536.2	598.3	657.5
35°	428.9	453.4	496.7	562.5	625.6
37.5°	385.7	411.1	457.2	527.7	593.6
40°	341.5	367.8	418.6	492.9	561.6
42.5°	297.3	325.5	379.1	457.2	529.6
45°	255.9	282.2	341.5	425.2	499.5
47.5°	224.8	242.7	303.8	394.1	465.6
50°	201.3	210.7	267.2	360.3	425.2
52.5°	183.4	190.0	233.3	323.6	392.3
55°	166.5	172.1	202.2	288.8	351.8
57.5°	151.4	154.3	178.7	254.9	313.2
60°	135.5	138.3	159.0	218.2	269.0
62.5°	121.3	123.2	143.0	183.4	228.6
65°	107.2	109.1	126.1	152.4	189.1
67.5°	94.1	96.9	110.1	124.2	150.5
70°	80.9	86.5	94.1	100.7	115.7
72.5°	69.6	75.3	79.0	80.9	81.8
75°	58.3	64.9	65.8	64.9	63.0
77.5°	47.0	52.7	52.7	50.8	48.9
80°	36.7	41.4	40.4	38.6	35.7
82.5°	27.3	30.1	29.2	27.3	24.5
85°	16.9	19.8	18.8	17.9	14.1
87.5°	8.5	11.3	10.3	9.4	5.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)