

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: P1058058

Luminaire Tested: S122RDR-S675D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058058  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55 )  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S675D840-X4F0-XX-UDD-WVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

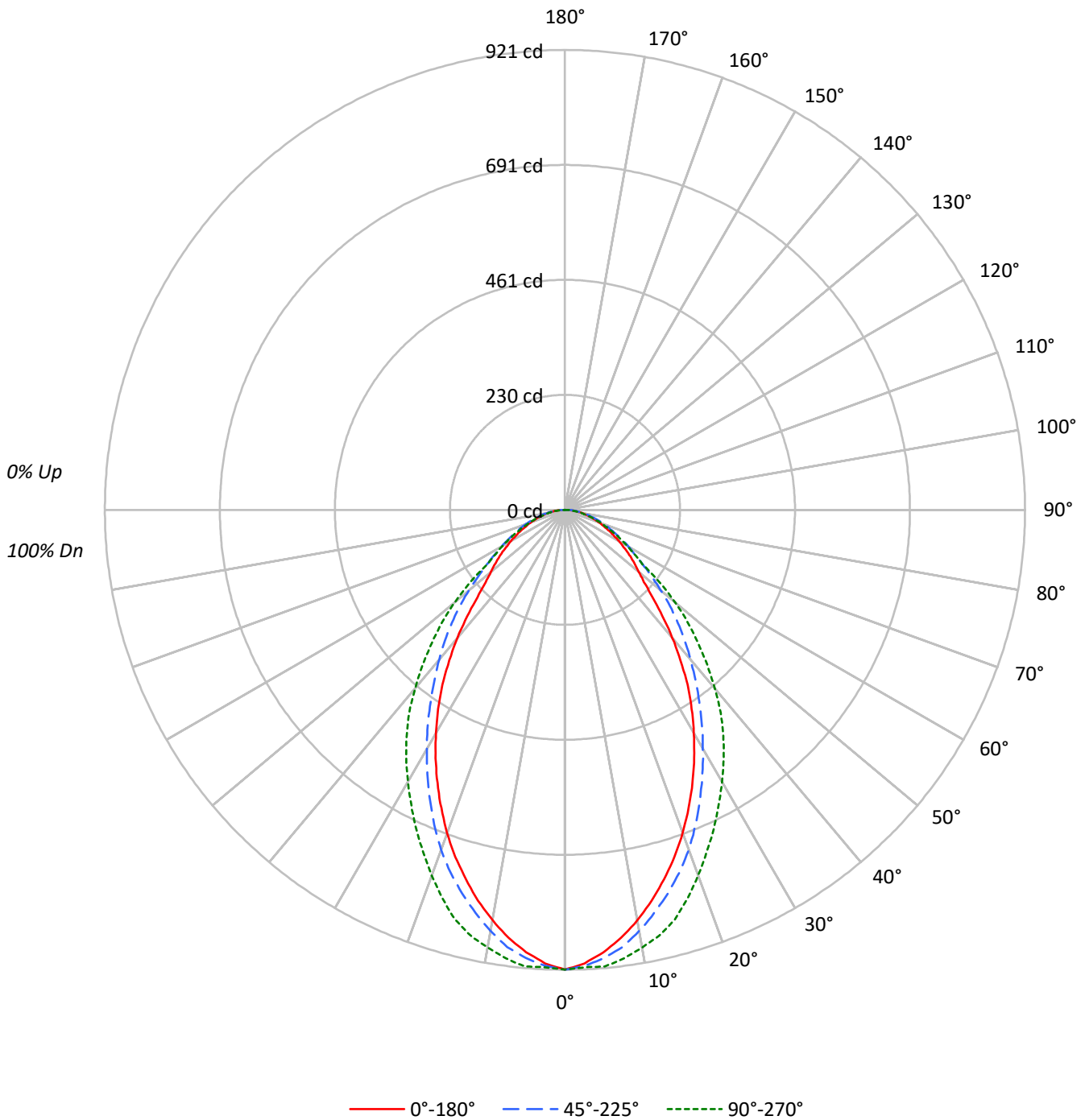
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1501.1 lumens  
Efficiency: N/A  
Efficacy: 58.2 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05  
Luminous Opening: Rectangular (W 0.15' 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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87		
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76		
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67		
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59		
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52		
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47		
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43		
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39		
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36		
10	59	47	40	35	58	46	39	35	46	39	35	45	39	35	44	38	34	33		

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

	0°	45°	90°
0°	16989	16989	16989
5°	16469	16687	17000
10°	15638	16046	16678
15°	14639	15187	16228
20°	13532	14231	15301
25°	12295	13022	14352
30°	10990	11770	13396
35°	9635	10549	12444
40°	8060	9421	11232
45°	6459	8345	9817
50°	5543	7191	8242
55°	5064	6116	6084
60°	4602	5407	5300
65°	4192	4842	4624
70°	3847	4435	4111
75°	3600	4092	3600
80°	3369	3783	3156
85°	3345	3980	2731

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9817 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.0	5.7
10°-20°	225.0	15.0
20°-30°	296.8	19.8
30°-40°	298.9	19.9
40°-50°	243.2	16.2
50°-60°	165.9	11.0
60°-70°	107.7	7.2
70°-80°	59.3	3.9
80°-90°	19.3	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°	606.8	40.4
0°-40°	905.7	60.3
0°-60°	1314.8	87.6
0°-90°	1501.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1501.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	921	921	921	921	921	
5°	889	906	901	909	918	83
15°	766	786	795	828	850	215
25°	604	624	640	668	705	277
35°	428	450	468	509	552	266
45°	248	278	320	348	376	195
55°	157	173	190	191	189	141
65°	96	114	111	105	106	95
75°	50	62	57	52	50	54
85°	16	21	19	15	13	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	920.7	920.7	920.7	920.7	920.7
2.5°	908.9	923.7	913.8	914.8	916.8
5°	889.1	905.9	900.9	908.9	917.8
7.5°	864.3	881.1	883.1	895.0	905.9
10°	834.6	853.4	856.4	874.2	890.1
12.5°	801.9	822.7	826.7	852.4	873.2
15°	766.3	786.1	795.0	827.7	849.5
17.5°	728.7	747.5	761.4	791.1	815.8
20°	689.1	706.9	724.7	751.5	779.2
22.5°	646.5	666.3	683.1	709.9	741.5
25°	603.9	623.7	639.6	668.3	704.9
27.5°	560.4	580.2	596.0	626.7	666.3
30°	515.8	536.6	552.4	587.1	628.7
32.5°	472.3	493.0	510.9	547.5	591.1
35°	427.7	449.5	468.3	508.9	552.4
37.5°	380.2	404.9	428.7	469.3	511.9
40°	334.6	362.4	391.1	428.7	466.3
42.5°	289.1	319.8	355.4	387.1	421.8
45°	247.5	278.2	319.8	347.5	376.2
47.5°	214.8	240.6	285.1	307.9	333.6
50°	193.1	210.9	250.5	268.3	287.1
52.5°	175.2	190.1	217.8	229.7	239.6
55°	157.4	173.3	190.1	191.1	189.1
57.5°	139.6	157.4	166.3	159.4	163.4
60°	124.7	142.6	146.5	139.6	143.6
62.5°	108.9	128.7	128.7	121.8	123.8
65°	96.0	113.9	110.9	104.9	105.9
67.5°	83.2	101.0	96.0	90.1	90.1
70°	71.3	88.1	82.2	76.2	76.2
72.5°	60.4	74.3	70.3	63.4	62.4
75°	50.5	62.4	57.4	51.5	50.5
77.5°	40.6	50.5	46.5	41.6	39.6
80°	31.7	40.6	35.6	31.7	29.7
82.5°	23.8	30.7	26.7	22.8	20.8
85°	15.8	20.8	18.8	14.9	12.9
87.5°	7.9	13.9	11.9	9.9	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)