

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: P1057977

Luminaire Tested: S122RDR-S485D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057977
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-S485D840-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

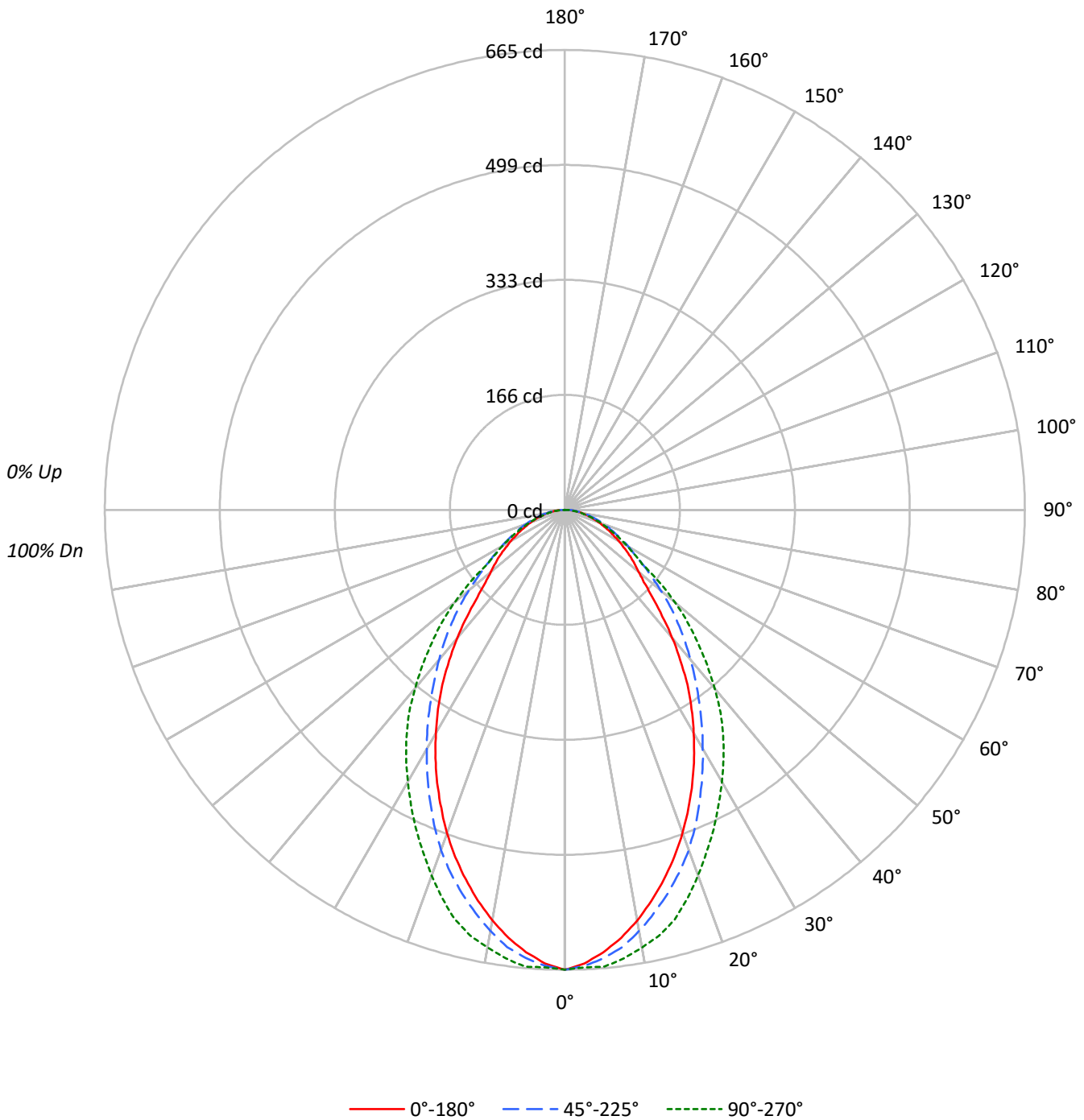
Lumens per Lamp: N/A
Luminaire Lumens: 1084.0 lumens
Efficiency: N/A
Efficacy: 55.3 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	100	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	40	35	46	39	35	45	39	35	44	38	34	33		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12269	12269	12269
5°	11892	12051	12277
10°	11293	11587	12042
15°	10572	10967	11718
20°	9771	10278	11050
25°	8879	9404	10365
30°	7937	8499	9673
35°	6958	7618	8986
40°	5822	6802	8110
45°	4663	6026	7090
50°	4002	5193	5951
55°	3658	4417	4395
60°	3325	3905	3827
65°	3030	3497	3340
70°	2778	3199	2973
75°	2602	2959	2602
80°	2433	2731	2274
85°	2414	2879	1969

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7090 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.4	5.7
10°-20°	162.5	15.0
20°-30°	214.3	19.8
30°-40°	215.8	19.9
40°-50°	175.7	16.2
50°-60°	119.8	11.0
60°-70°	77.7	7.2
70°-80°	42.8	3.9
80°-90°	14.0	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°	438.2	40.4
0°-40°	654.1	60.3
0°-60°	949.5	87.6
0°-90°	1084.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1084.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	665	665	665	665	665	
5°	642	654	651	656	663	60
15°	553	568	574	598	613	155
25°	436	450	462	483	509	200
35°	309	325	338	368	399	192
45°	179	201	231	251	272	141
55°	114	125	137	138	137	102
65°	69	82	80	76	76	69
75°	36	45	42	37	36	39
85°	11	15	14	11	9	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	664.9	664.9	664.9	664.9	664.9
2.5°	656.3	667.1	659.9	660.6	662.1
5°	642.0	654.2	650.6	656.3	662.8
7.5°	624.2	636.3	637.7	646.3	654.2
10°	602.7	616.3	618.4	631.3	642.7
12.5°	579.1	594.1	597.0	615.6	630.6
15°	553.4	567.7	574.1	597.7	613.4
17.5°	526.2	539.8	549.8	571.3	589.1
20°	497.6	510.5	523.4	542.7	562.7
22.5°	466.9	481.2	493.3	512.6	535.5
25°	436.1	450.4	461.9	482.6	509.1
27.5°	404.7	419.0	430.4	452.6	481.2
30°	372.5	387.5	398.9	424.0	454.0
32.5°	341.0	356.1	368.9	395.4	426.8
35°	308.9	324.6	338.2	367.5	398.9
37.5°	274.5	292.4	309.6	338.9	369.6
40°	241.7	261.7	282.4	309.6	336.7
42.5°	208.8	230.9	256.7	279.5	304.6
45°	178.7	200.9	230.9	251.0	271.7
47.5°	155.1	173.7	205.9	222.4	240.9
50°	139.4	152.3	180.9	193.8	207.3
52.5°	126.5	137.3	157.3	165.9	173.0
55°	113.7	125.1	137.3	138.0	136.6
57.5°	100.8	113.7	120.1	115.1	118.0
60°	90.1	103.0	105.8	100.8	103.7
62.5°	78.6	92.9	92.9	87.9	89.4
65°	69.4	82.2	80.1	75.8	76.5
67.5°	60.1	72.9	69.4	65.1	65.1
70°	51.5	63.6	59.3	55.1	55.1
72.5°	43.6	53.6	50.8	45.8	45.0
75°	36.5	45.0	41.5	37.2	36.5
77.5°	29.3	36.5	33.6	30.0	28.6
80°	22.9	29.3	25.7	22.9	21.4
82.5°	17.2	22.2	19.3	16.4	15.0
85°	11.4	15.0	13.6	10.7	9.3
87.5°	5.7	10.0	8.6	7.1	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)