

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: P1057808

Luminaire Tested: S122RDR-S1005D840-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057808
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S1005D840-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

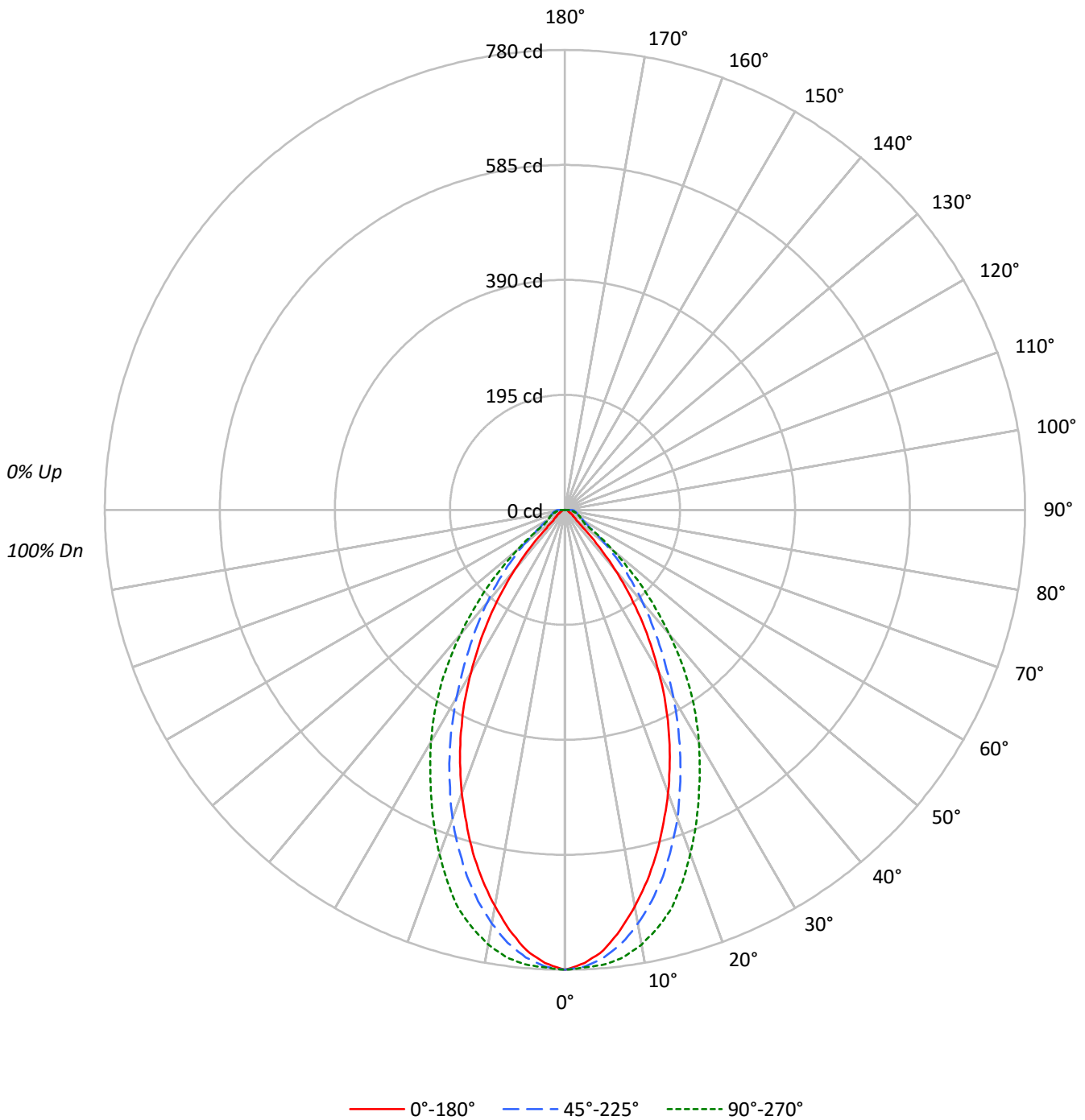
Lumens per Lamp: N/A
Luminaire Lumens: 840.7 lumens
Efficiency: N/A
Efficacy: 20.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61				
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57				
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52				
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48				
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45				
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14391	14391	14391
5°	13892	14114	14335
10°	12794	13354	14025
15°	11502	12274	13357
20°	10034	10944	12204
25°	8488	9431	10921
30°	6780	7830	9678
35°	5014	6294	8312
40°	3168	4931	6622
45°	1247	3703	4875
50°	643	2489	3003
55°	528	1634	1345
60°	388	1325	1214
65°	327	1240	1240
70°	324	1289	1209
75°	428	1490	1276
80°	638	1902	1424
85°	953	3155	1905

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 6303 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.3	8.5
10°-20°	180.2	21.4
20°-30°	214.1	25.5
30°-40°	178.1	21.2
40°-50°	99.5	11.8
50°-60°	40.2	4.8
60°-70°	25.7	3.1
70°-80°	19.3	2.3
80°-90°	12.3	1.5
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°	465.6	55.4
0°-40°	643.7	76.6
0°-60°	783.4	93.2
0°-90°	840.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	840.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	780	780	780	780	780	
5°	750	764	762	768	774	69
15°	602	620	642	675	699	167
25°	417	433	463	499	536	190
35°	223	244	279	326	369	138
45°	48	81	142	166	187	45
55°	16	34	51	49	42	14
65°	8	30	28	27	28	8
75°	6	21	21	19	18	6
85°	4	13	15	13	9	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	779.9	779.9	779.9	779.9	779.9
2.5°	769.5	781.4	775.4	775.4	776.9
5°	750.0	763.5	762.0	768.0	773.9
7.5°	718.7	733.6	741.1	754.5	765.0
10°	682.8	699.2	712.7	733.6	748.5
12.5°	644.0	660.4	679.8	706.7	726.1
15°	602.1	620.0	642.5	675.3	699.2
17.5°	555.8	575.2	600.6	636.5	661.9
20°	511.0	530.4	557.3	593.2	621.5
22.5°	464.7	481.1	509.5	545.3	579.7
25°	416.9	433.3	463.2	499.0	536.4
27.5°	369.0	385.5	415.4	452.7	494.5
30°	318.2	336.2	367.5	409.4	454.2
32.5°	270.4	288.4	321.2	367.5	412.4
35°	222.6	243.5	279.4	325.7	369.0
37.5°	176.3	200.2	240.5	283.9	322.7
40°	131.5	156.9	204.7	242.0	274.9
42.5°	86.7	116.5	171.8	203.2	228.6
45°	47.8	80.7	141.9	165.8	186.8
47.5°	26.9	52.3	112.1	131.5	143.4
50°	22.4	38.8	86.7	100.1	104.6
52.5°	17.9	35.9	65.7	73.2	70.2
55°	16.4	34.4	50.8	49.3	41.8
57.5°	13.4	34.4	40.3	35.9	35.9
60°	10.5	32.9	35.9	31.4	32.9
62.5°	9.0	31.4	32.9	29.9	29.9
65°	7.5	29.9	28.4	26.9	28.4
67.5°	6.0	26.9	26.9	25.4	25.4
70°	6.0	25.4	23.9	22.4	22.4
72.5°	6.0	22.4	22.4	20.9	20.9
75°	6.0	20.9	20.9	19.4	17.9
77.5°	6.0	17.9	19.4	17.9	16.4
80°	6.0	16.4	17.9	16.4	13.4
82.5°	6.0	14.9	16.4	14.9	12.0
85°	4.5	13.4	14.9	13.4	9.0
87.5°	4.5	13.4	14.9	12.0	7.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)