

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: P1055247

Luminaire Tested: S122R3DR-S675D940-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055247
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S675D940-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

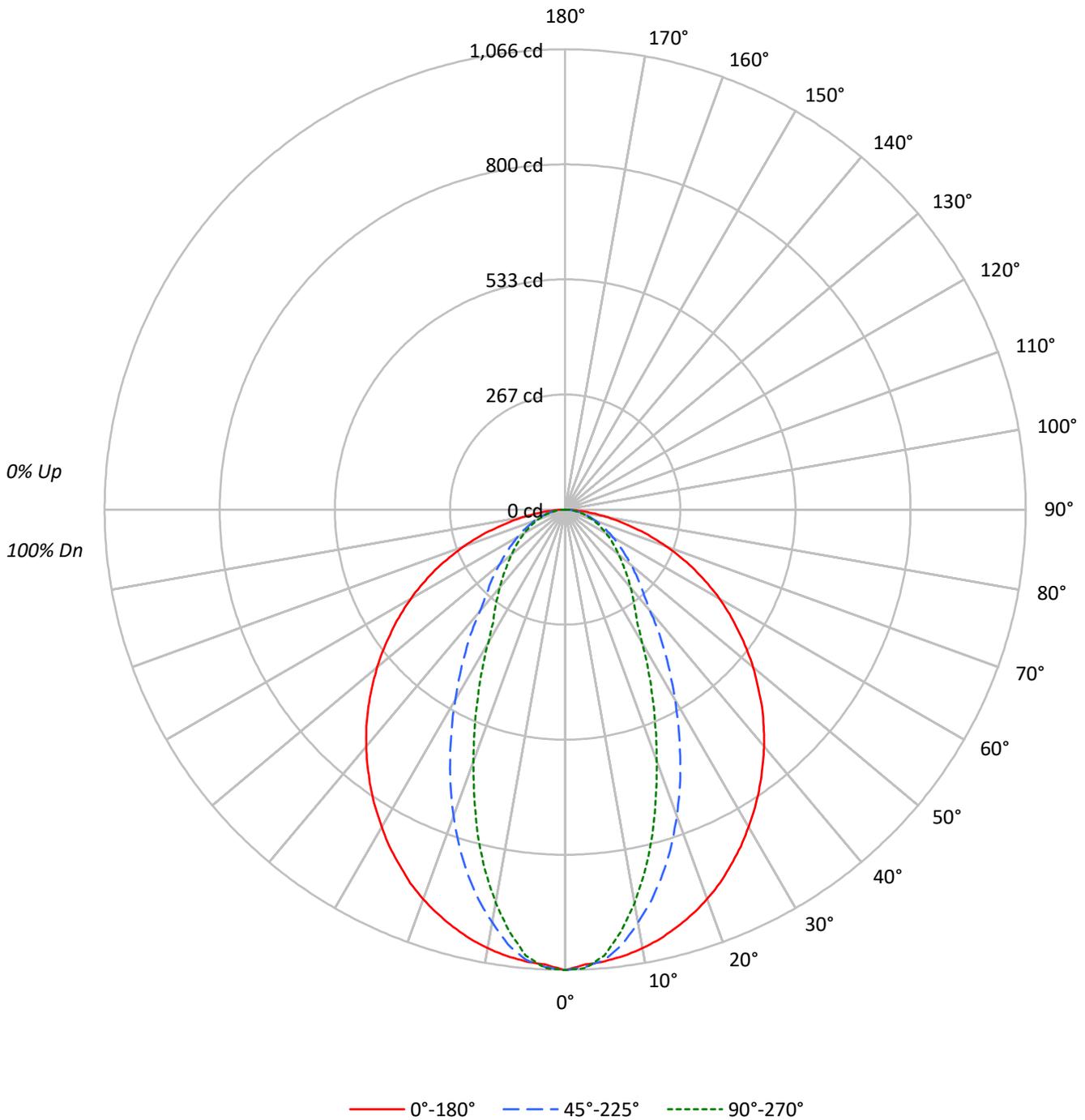
Lumens per Lamp: N/A
Luminaire Lumens: 1613.1 lumens
Efficiency: N/A
Efficacy: 61.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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	101	97	100	97	94	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66				
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58				
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52				
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20206	20206	20206
5°	19977	19910	19724
10°	19848	18682	17789
15°	19624	17123	15303
20°	19363	15228	12494
25°	18977	13159	9974
30°	18571	11120	7784
35°	18149	9302	6538
40°	17708	7543	5822
45°	17250	6594	5209
50°	16742	5836	4757
55°	16169	5272	4420
60°	15611	4797	4123
65°	14870	4398	3878
70°	13782	4099	3656
75°	12203	3719	3462
80°	10409	3502	3208
85°	7174	3109	2913

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 17250 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.7	6.1
10°-20°	246.7	15.3
20°-30°	304.0	18.8
30°-40°	291.7	18.1
40°-50°	251.6	15.6
50°-60°	195.2	12.1
60°-70°	133.7	8.3
70°-80°	72.6	4.5
80°-90°	19.9	1.2
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°	648.5	40.2
0°-40°	940.2	58.3
0°-60°	1387.0	86.0
0°-90°	1613.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1613.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1066	1066	1066	1066	1066	
5°	1050	1066	1047	1034	1037	100
15°	1000	970	873	802	780	282
25°	908	811	630	514	477	418
35°	785	622	402	300	283	491
45°	644	433	246	203	194	496
55°	490	260	160	138	134	438
65°	332	142	98	89	86	327
75°	167	65	51	48	47	179
85°	33	16	14	14	13	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1066.5	1066.5	1066.5	1066.5	1066.5
2.5°	1054.9	1072.7	1060.2	1060.2	1062.9
5°	1050.4	1065.6	1046.9	1033.5	1037.1
7.5°	1042.4	1053.1	1015.7	987.1	986.2
10°	1031.7	1032.6	971.1	933.6	924.7
12.5°	1018.3	1004.1	925.6	869.4	856.0
15°	1000.5	970.2	873.0	801.6	780.2
17.5°	981.8	935.4	816.8	727.6	698.2
20°	960.4	893.5	755.3	653.6	619.7
22.5°	936.3	853.4	693.8	582.3	546.6
25°	907.8	810.6	629.5	513.6	477.1
27.5°	880.1	766.9	568.0	453.0	415.5
30°	848.9	719.6	508.3	395.0	355.8
32.5°	817.7	671.5	453.0	339.7	310.3
35°	784.7	622.4	402.2	299.6	282.7
37.5°	750.8	574.3	354.0	272.9	257.7
40°	716.0	526.1	305.0	247.0	235.4
42.5°	680.4	478.8	271.1	225.6	214.9
45°	643.8	433.4	246.1	203.3	194.4
47.5°	604.6	387.9	222.0	184.6	176.6
50°	568.0	344.2	198.0	167.6	161.4
52.5°	528.8	301.4	178.3	152.5	147.1
55°	489.5	260.4	159.6	138.2	133.8
57.5°	451.2	221.1	141.8	124.8	121.3
60°	412.0	189.9	126.6	112.4	108.8
62.5°	371.8	165.0	112.4	100.8	97.2
65°	331.7	141.8	98.1	89.2	86.5
67.5°	289.8	119.5	85.6	78.5	76.7
70°	248.8	99.9	74.0	67.8	66.0
72.5°	208.7	81.1	62.4	58.0	56.2
75°	166.7	65.1	50.8	48.2	47.3
77.5°	130.2	50.8	41.0	39.2	38.3
80°	95.4	37.5	32.1	30.3	29.4
82.5°	63.3	25.9	23.2	22.3	21.4
85°	33.0	16.1	14.3	14.3	13.4
87.5°	10.7	7.1	7.1	7.1	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)