

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: P1055682

Luminaire Tested: S123R3DR-S775D950-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055682
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DR-S775D950-X4F0-XX-UDD-FLL-W
Description: DEFINE 3, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

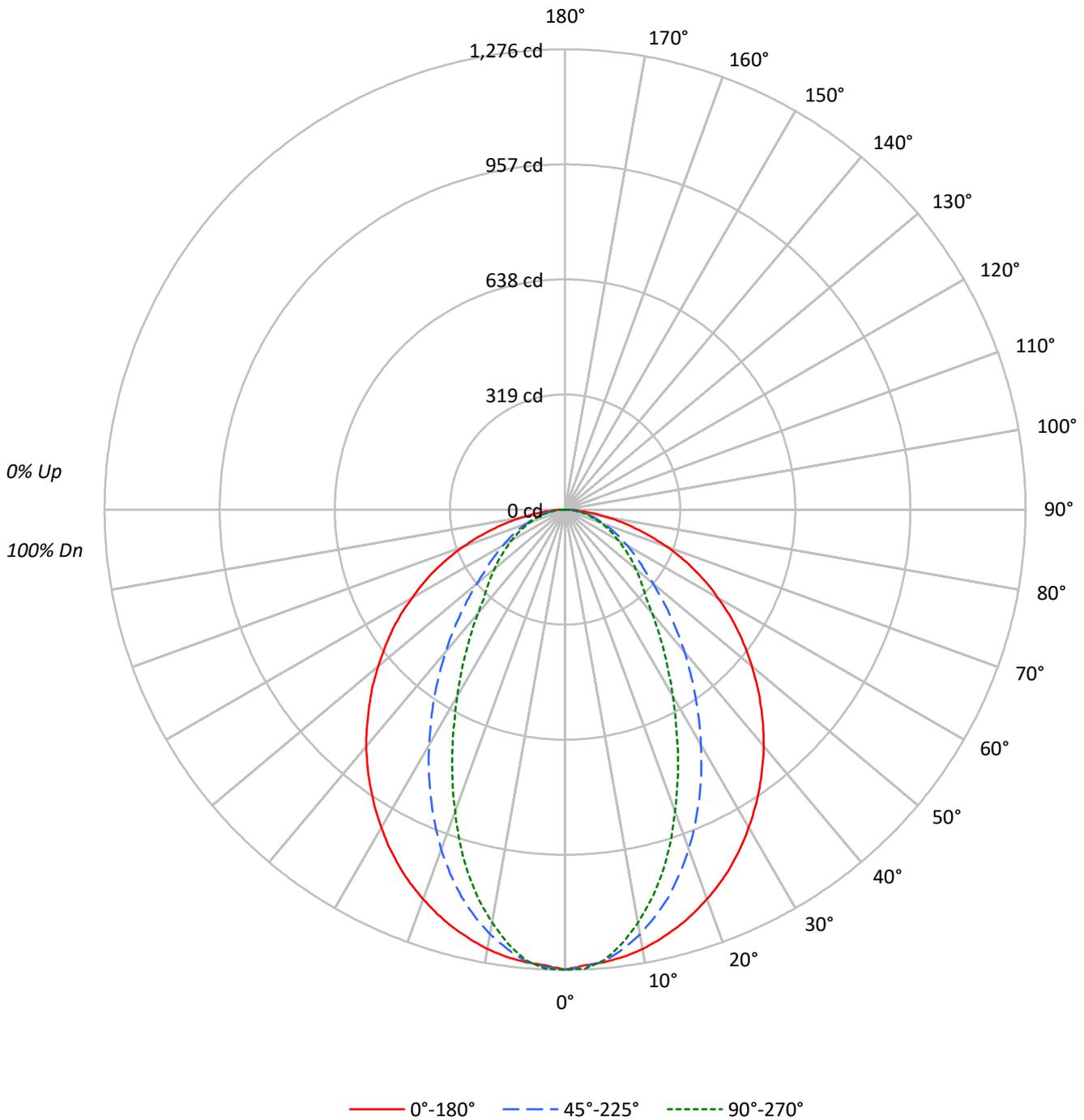
Lumens per Lamp: N/A
Luminaire Lumens: 2237.0 lumens
Efficiency: N/A
Efficacy: 84.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.83 / 1.02
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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	107	104	100	97	99	97	94	96	93	91	92	90	88	86				
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	83	79	76	74				
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65				
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57				
5	80	68	60	54	78	67	60	54	65	58	53	63	57	53	62	56	52	50				
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45				
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40				
8	65	53	45	39	64	52	44	39	51	44	39	49	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	37	33	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15378	15378	15378
5°	15241	15206	15172
10°	15148	14635	14237
15°	14968	13861	13003
20°	14750	12865	11432
25°	14493	11713	9835
30°	14171	10479	8314
35°	13831	9267	7021
40°	13483	8093	5900
45°	13078	6979	5205
50°	12668	5940	4777
55°	12292	5295	4412
60°	11777	4784	4118
65°	11294	4382	3866
70°	10526	4036	3631
75°	9419	3731	3424
80°	8082	3444	3180
85°	5672	3168	3029

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13078 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.2	5.3
10°-20°	312.8	14.0
20°-30°	412.1	18.4
30°-40°	418.2	18.7
40°-50°	363.5	16.3
50°-60°	284.8	12.7
60°-70°	193.5	8.7
70°-80°	104.9	4.7
80°-90°	28.9	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°	843.1	37.7
0°-40°	1261.4	56.4
0°-60°	1909.7	85.4
0°-90°	2237.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2237.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1276	1276	1276	1276	1276	
5°	1259	1274	1256	1245	1254	120
15°	1199	1182	1110	1056	1042	338
25°	1090	1024	880	771	739	501
35°	940	828	630	509	477	588
45°	767	615	409	316	305	592
55°	585	406	252	215	210	522
65°	396	219	154	137	136	391
75°	202	101	80	74	74	216
85°	41	25	23	21	22	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1275.5	1275.5	1275.5	1275.5	1275.5
2.5°	1265.0	1281.2	1268.8	1269.8	1273.6
5°	1259.3	1274.5	1256.4	1245.0	1253.6
7.5°	1250.7	1262.1	1228.8	1210.6	1213.5
10°	1237.3	1241.2	1195.4	1166.7	1162.9
12.5°	1219.2	1212.5	1155.3	1113.3	1106.6
15°	1199.2	1182.0	1110.5	1056.1	1041.8
17.5°	1176.3	1147.7	1058.0	991.2	969.3
20°	1149.6	1109.5	1002.7	917.7	891.0
22.5°	1120.9	1069.4	942.6	842.4	814.7
25°	1089.5	1023.6	880.5	770.8	739.3
27.5°	1055.1	977.8	817.6	700.2	664.9
30°	1017.9	930.1	752.7	631.5	597.2
32.5°	979.8	879.6	690.7	567.6	534.2
35°	939.7	828.1	629.6	509.4	477.0
37.5°	898.7	775.6	570.5	454.1	423.6
40°	856.7	722.2	514.2	402.6	374.9
42.5°	811.9	668.8	459.8	353.9	332.9
45°	767.0	615.3	409.3	315.8	305.3
47.5°	722.2	561.0	361.6	289.1	279.5
50°	675.4	508.5	316.7	264.3	254.7
52.5°	629.6	457.0	279.5	240.4	233.7
55°	584.8	406.4	251.9	214.6	209.9
57.5°	538.1	356.8	224.2	194.6	188.9
60°	488.4	309.1	198.4	173.6	170.8
62.5°	443.6	264.3	175.5	155.5	152.6
65°	395.9	219.4	153.6	137.4	135.5
67.5°	347.3	182.2	133.6	120.2	119.2
70°	298.6	153.6	114.5	104.0	103.0
72.5°	250.9	126.9	96.4	89.7	87.8
75°	202.2	101.1	80.1	74.4	73.5
77.5°	158.4	78.2	63.9	60.1	59.1
80°	116.4	58.2	49.6	46.7	45.8
82.5°	76.3	40.1	35.3	33.4	33.4
85°	41.0	24.8	22.9	21.0	21.9
87.5°	14.3	10.5	10.5	9.5	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)