

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: P1055664

Luminaire Tested: S123R3DR-S775D840-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055664
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-S775D840-X4F0-XX-UDD-FLL-W
Description: DEFINE 3, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

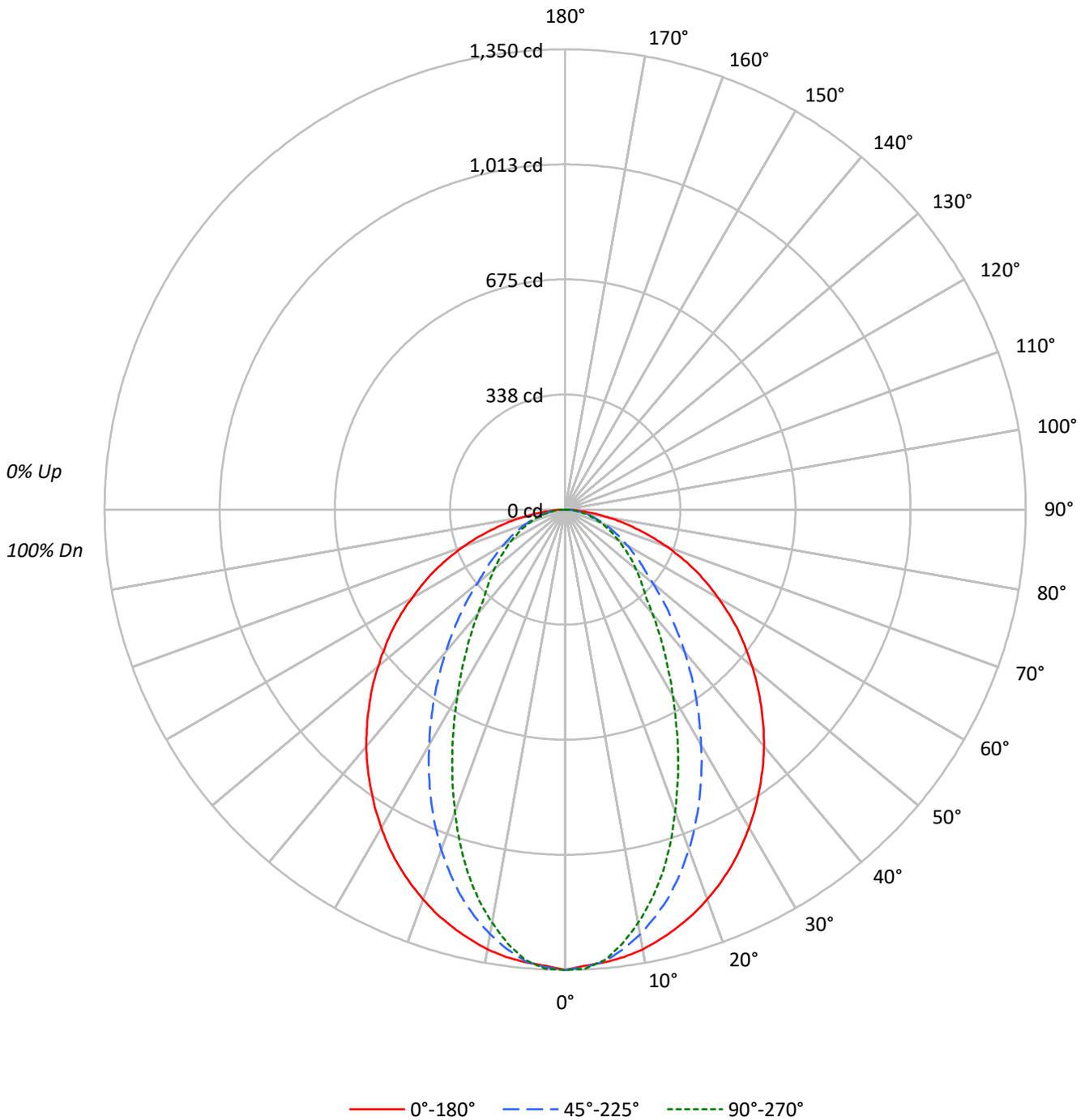
Lumens per Lamp: N/A
Luminaire Lumens: 2368.0 lumens
Efficiency: N/A
Efficacy: 89.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.83 / 1.02
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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	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°	16279	16279	16279
5°	16133	16096	16060
10°	16035	15492	15070
15°	15844	14672	13765
20°	15613	13618	12101
25°	15342	12400	10411
30°	15000	11093	8801
35°	14640	9810	7431
40°	14273	8566	6247
45°	13843	7386	5511
50°	13411	6289	5057
55°	13011	5604	4671
60°	12469	5066	4360
65°	11956	4639	4091
70°	11143	4272	3846
75°	9973	3950	3624
80°	8554	3645	3367
85°	6004	3348	3209

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13843 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.2	5.3
10°-20°	331.1	14.0
20°-30°	436.2	18.4
30°-40°	442.7	18.7
40°-50°	384.8	16.3
50°-60°	301.5	12.7
60°-70°	204.9	8.7
70°-80°	111.0	4.7
80°-90°	30.6	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°	892.5	37.7
0°-40°	1335.2	56.4
0°-60°	2021.6	85.4
0°-90°	2368.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2368.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1350	1350	1350	1350	1350	
5°	1333	1349	1330	1318	1327	127
15°	1269	1251	1176	1118	1103	358
25°	1153	1084	932	816	783	531
35°	995	877	666	539	505	622
45°	812	651	433	334	323	627
55°	619	430	267	227	222	553
65°	419	232	163	145	143	414
75°	214	107	85	79	78	229
85°	43	26	24	22	23	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1350.2	1350.2	1350.2	1350.2	1350.2
2.5°	1339.1	1356.2	1343.1	1344.1	1348.2
5°	1333.0	1349.2	1330.0	1317.9	1327.0
7.5°	1323.9	1336.1	1300.7	1281.5	1284.5
10°	1309.8	1313.8	1265.4	1235.1	1231.0
12.5°	1290.6	1283.5	1222.9	1178.5	1171.4
15°	1269.4	1251.2	1175.5	1117.9	1102.8
17.5°	1245.2	1214.9	1119.9	1049.2	1026.0
20°	1216.9	1174.5	1061.4	971.5	943.2
22.5°	1186.6	1132.1	997.7	891.7	862.4
25°	1153.3	1083.6	932.1	816.0	782.6
27.5°	1116.9	1035.1	865.5	741.2	703.9
30°	1077.5	984.6	796.8	668.5	632.2
32.5°	1037.1	931.1	731.1	600.9	565.5
35°	994.7	876.6	666.5	539.3	504.9
37.5°	951.3	821.0	603.9	480.7	448.4
40°	906.9	764.5	544.3	426.2	396.9
42.5°	859.4	707.9	486.8	374.7	352.4
45°	811.9	651.4	433.2	334.3	323.2
47.5°	764.5	593.8	382.7	306.0	295.9
50°	715.0	538.3	335.3	279.7	269.6
52.5°	666.5	483.7	295.9	254.5	247.4
55°	619.0	430.2	266.6	227.2	222.2
57.5°	569.6	377.7	237.3	206.0	200.0
60°	517.1	327.2	210.1	183.8	180.8
62.5°	469.6	279.7	185.8	164.6	161.6
65°	419.1	232.3	162.6	145.4	143.4
67.5°	367.6	192.9	141.4	127.2	126.2
70°	316.1	162.6	121.2	110.1	109.1
72.5°	265.6	134.3	102.0	94.9	92.9
75°	214.1	107.0	84.8	78.8	77.8
77.5°	167.6	82.8	67.7	63.6	62.6
80°	123.2	61.6	52.5	49.5	48.5
82.5°	80.8	42.4	37.4	35.3	35.3
85°	43.4	26.3	24.2	22.2	23.2
87.5°	15.1	11.1	11.1	10.1	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)