

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: P1056066

Luminaire Tested: S124R3DR-S795D835-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056066
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124R3DR-S795D835-X4F0-XX-UDD-FLL-W
Description: DEFINE 4, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

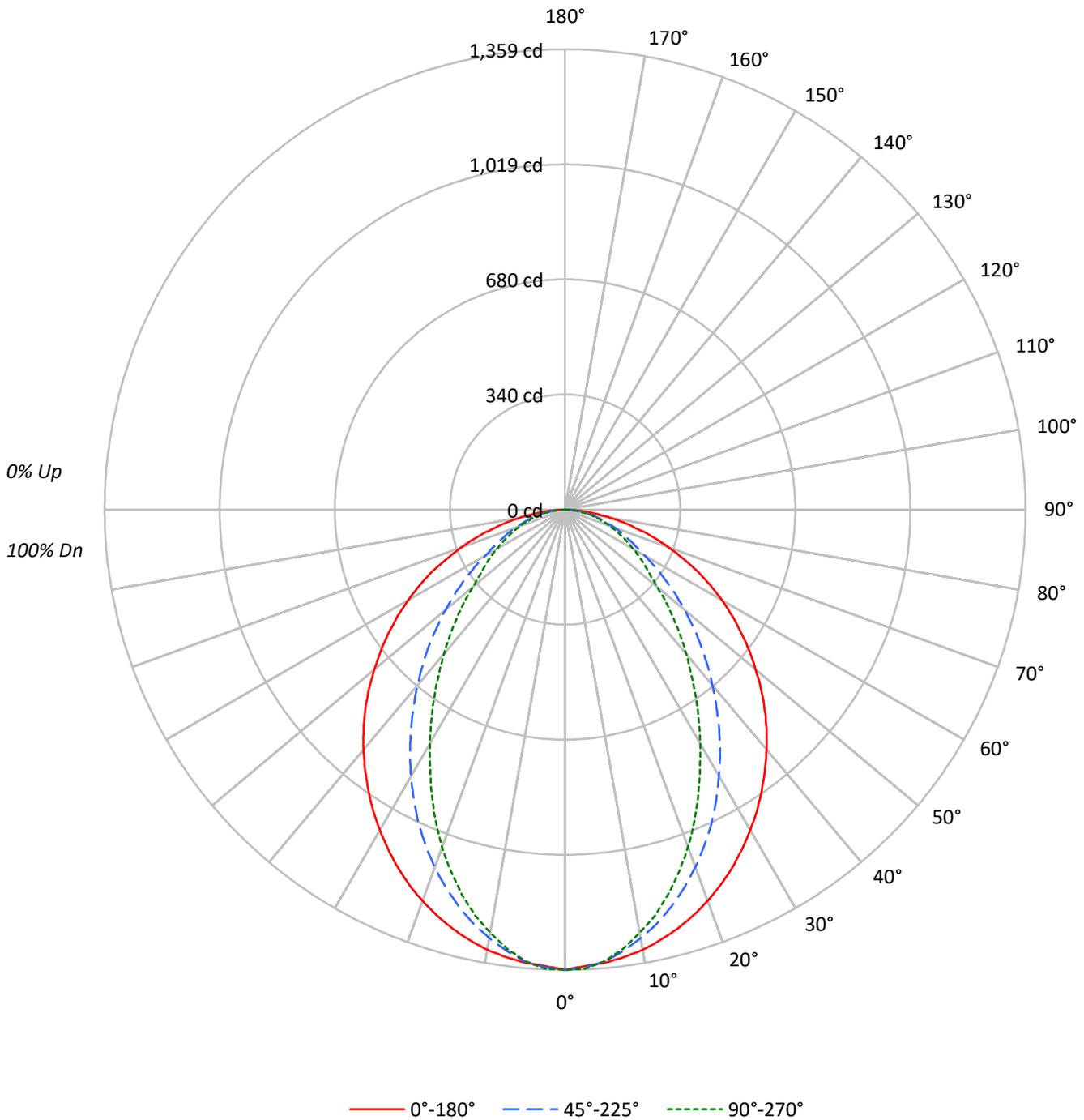
Lumens per Lamp: N/A
Luminaire Lumens: 2706.8 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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									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	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	105	102	98	107	103	100	97	99	96	93	95	93	91	92	90	88	86																												
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	76	73																												
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63																												
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55																												
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49																												
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43																												
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39																												
8	64	51	43	38	62	51	43	38	49	42	37	48	42	37	47	41	37	35																												
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32																												
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12015	12015	12015
5°	11919	11893	11884
10°	11851	11536	11393
15°	11725	11103	10764
20°	11573	10575	9983
25°	11385	9970	9073
30°	11159	9280	8147
35°	10923	8559	7253
40°	10676	7814	6417
45°	10415	7090	5639
50°	10096	6327	4869
55°	9788	5565	4424
60°	9443	4774	4102
65°	9017	4331	3828
70°	8376	4007	3619
75°	7584	3689	3416
80°	6619	3411	3208
85°	5072	3145	2942

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10415 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.5	4.7
10°-20°	343.2	12.7
20°-30°	475.2	17.6
30°-40°	510.0	18.8
40°-50°	463.9	17.1
50°-60°	365.3	13.5
60°-70°	250.0	9.2
70°-80°	134.6	5.0
80°-90°	38.1	1.4
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°	944.9	34.9
0°-40°	1455.0	53.8
0°-60°	2284.1	84.4
0°-90°	2706.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2706.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1359	1359	1359	1359	1359	
5°	1343	1358	1340	1333	1339	127
15°	1281	1267	1213	1180	1176	361
25°	1167	1119	1022	948	930	537
35°	1012	933	793	697	672	633
45°	833	727	567	469	451	642
55°	635	514	361	291	287	568
65°	431	308	207	184	183	425
75°	222	135	108	99	100	237
85°	50	34	31	29	29	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1359	1359	1359	1359	1359
2.5°	1349	1365	1353	1355	1357
5°	1343	1358	1340	1333	1339
7.5°	1333	1343	1315	1302	1308
10°	1320	1322	1285	1266	1269
12.5°	1302	1297	1252	1225	1227
15°	1281	1267	1213	1180	1176
17.5°	1257	1234	1170	1128	1120
20°	1230	1199	1124	1070	1061
22.5°	1200	1160	1074	1010	997
25°	1167	1119	1022	948	930
27.5°	1131	1075	966	885	862
30°	1093	1029	909	822	798
32.5°	1054	982	851	759	734
35°	1012	933	793	697	672
37.5°	969	882	734	637	611
40°	925	831	677	577	556
42.5°	880	779	621	521	502
45°	833	727	567	469	451
47.5°	785	674	512	420	403
50°	734	621	460	372	354
52.5°	685	567	410	325	316
55°	635	514	361	291	287
57.5°	585	461	316	264	260
60°	534	409	270	236	232
62.5°	483	358	236	209	207
65°	431	308	207	184	183
67.5°	376	260	181	162	161
70°	324	212	155	140	140
72.5°	275	168	131	119	119
75°	222	135	108	99	100
77.5°	175	106	87	81	81
80°	130	79	67	62	63
82.5°	88	55	48	45	45
85°	50	34	31	29	29
87.5°	18	16	15	13	14
90°	0	0	0	0	0

(END OF REPORT)