

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: P998559

Luminaire Tested: S124DR-B795DB30-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P998559
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-5)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DR-B795DB30-4F0-XX-W2A-F
Description: Define 4 Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

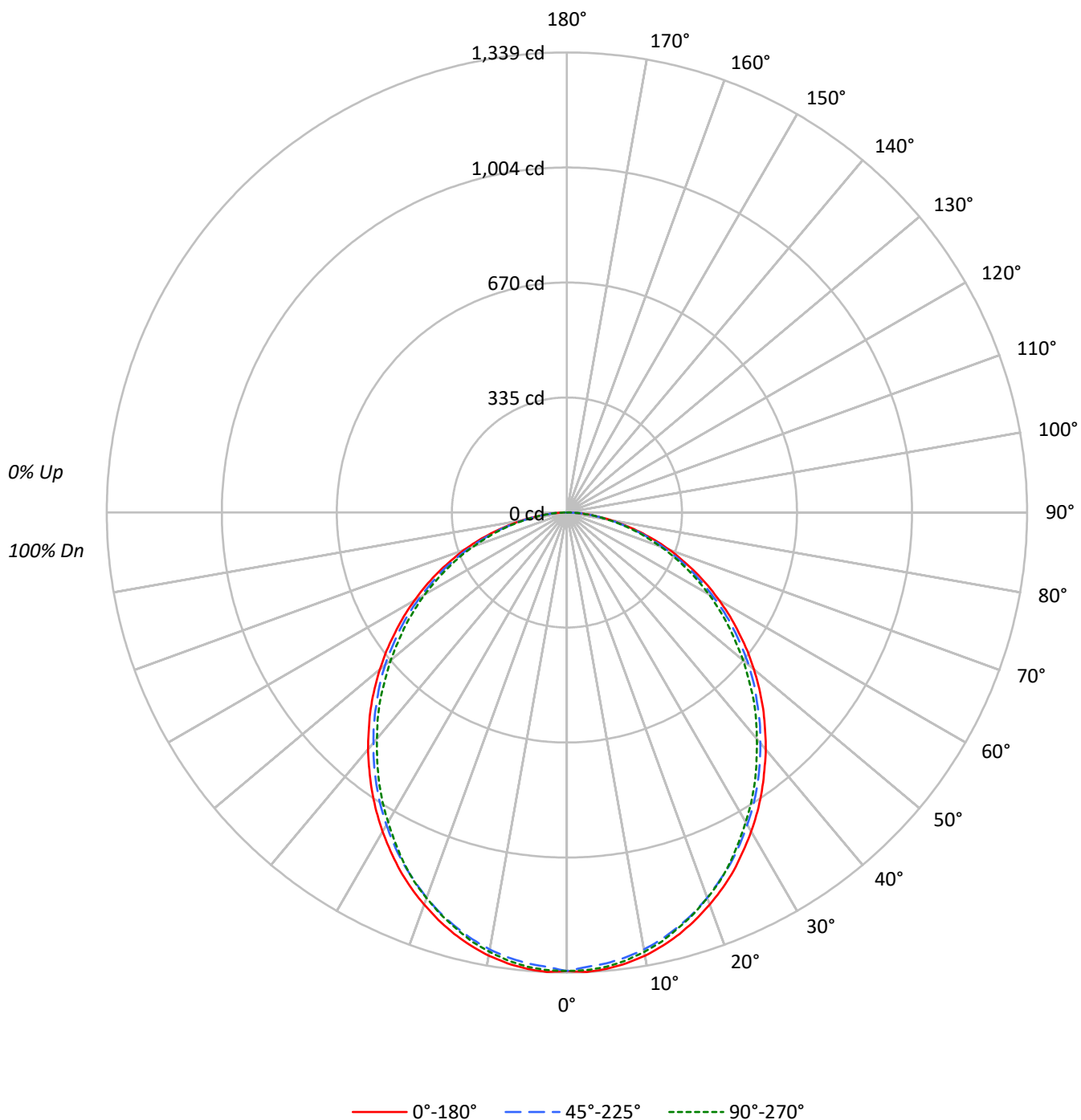
Lumens per Lamp: N/A
Luminaire Lumens: 3425.0 lumens
Efficiency: N/A
Efficacy: 95.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35.9
Input Voltage (V):
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90
2	99	91	84	79	97	89	83	78	86	80	76		82	78	74		79
3	91	80	72	66	88	79	71	65	76	69	64		73	67	63		70
4	83	71	63	56	81	70	62	56	67	60	55		65	59	54		63
5	77	64	55	48	74	63	54	48	61	53	48		59	52	47		57
6	71	58	49	42	69	57	48	42	55	47	42		53	47	41		52
7	66	52	44	38	64	52	43	37	50	43	37		49	42	37		47
8	61	48	39	34	60	47	39	34	46	39	33		45	38	33		43
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40
10	54	41	33	28	52	40	33	28	39	32	27		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10881	10881	10881
5°	10914	10783	10862
10°	10846	10695	10748
15°	10715	10543	10570
20°	10540	10355	10364
25°	10342	10140	10111
30°	10098	9887	9796
35°	9845	9622	9495
40°	9584	9322	9151
45°	9310	9026	8853
50°	9007	8762	8491
55°	8679	8422	8148
60°	8353	8039	7794
65°	7984	7676	7365
70°	7572	7188	6909
75°	6941	6604	6434
80°	6175	5926	5776
85°	5399	5202	5099

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9310 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.8	3.7
10°-20°	354.3	10.3
20°-30°	521.5	15.2
30°-40°	606.2	17.7
40°-50°	606.2	17.7
50°-60°	530.2	15.5
60°-70°	393.6	11.5
70°-80°	223.3	6.5
80°-90°	64.0	1.9
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°	1001.6	29.2
0°-40°	1607.8	46.9
0°-60°	2744.1	80.1
0°-90°	3425.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3425.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1334	1334	1334	1334	1334	
5°	1333	1329	1317	1329	1327	127
15°	1269	1265	1249	1255	1252	358
25°	1149	1142	1127	1128	1124	529
35°	989	982	967	959	954	618
45°	807	800	783	771	768	622
55°	610	607	592	580	573	547
65°	414	408	398	387	382	410
75°	220	215	210	205	204	234
85°	58	58	56	56	54	66
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1334.4	1334.4	1334.4	1334.4	1334.4
2.5°	1338.7	1335.5	1323.7	1334.4	1333.3
5°	1333.3	1329.1	1317.3	1329.1	1326.9
7.5°	1323.7	1319.4	1306.6	1316.2	1315.2
10°	1309.8	1305.5	1291.6	1300.2	1298.0
12.5°	1291.6	1287.4	1272.4	1282.0	1278.8
15°	1269.2	1264.9	1248.9	1255.3	1252.1
17.5°	1243.5	1238.2	1223.2	1227.5	1225.3
20°	1214.6	1209.3	1193.3	1196.5	1194.3
22.5°	1183.6	1176.2	1160.1	1166.5	1162.3
25°	1149.4	1141.9	1127.0	1128.0	1123.8
27.5°	1110.9	1103.4	1089.5	1087.4	1082.1
30°	1072.4	1063.9	1050.0	1045.7	1040.4
32.5°	1031.8	1024.3	1009.4	1004.0	998.7
35°	989.0	981.6	966.6	959.1	953.8
37.5°	944.1	937.7	921.7	914.2	906.7
40°	900.3	891.7	875.7	865.0	859.7
42.5°	853.2	849.0	830.8	818.0	814.8
45°	807.3	799.8	782.7	770.9	767.7
47.5°	759.2	753.8	737.8	724.9	716.4
50°	710.0	705.7	690.7	675.8	669.3
52.5°	661.9	656.5	640.5	627.6	619.1
55°	610.5	607.3	592.4	579.5	573.1
57.5°	562.4	559.2	544.2	531.4	525.0
60°	512.2	506.8	492.9	483.3	477.9
62.5°	463.0	458.7	443.7	435.2	429.8
65°	413.8	408.4	397.8	387.1	381.7
67.5°	363.5	359.3	348.6	337.9	336.8
70°	317.6	310.1	301.5	293.0	289.8
72.5°	268.4	260.9	254.5	248.1	244.9
75°	220.3	214.9	209.6	205.3	204.2
77.5°	173.2	171.1	165.7	164.7	161.5
80°	131.5	128.3	126.2	124.0	123.0
82.5°	90.9	89.8	89.8	88.7	87.7
85°	57.7	57.7	55.6	55.6	54.5
87.5°	27.8	26.7	25.7	25.7	25.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)