

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: P994934

Luminaire Tested: S123RDR-B1000DB35-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P994934
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-B1000DB35-4F0-XX-W2A-F
Description: Define 3 Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

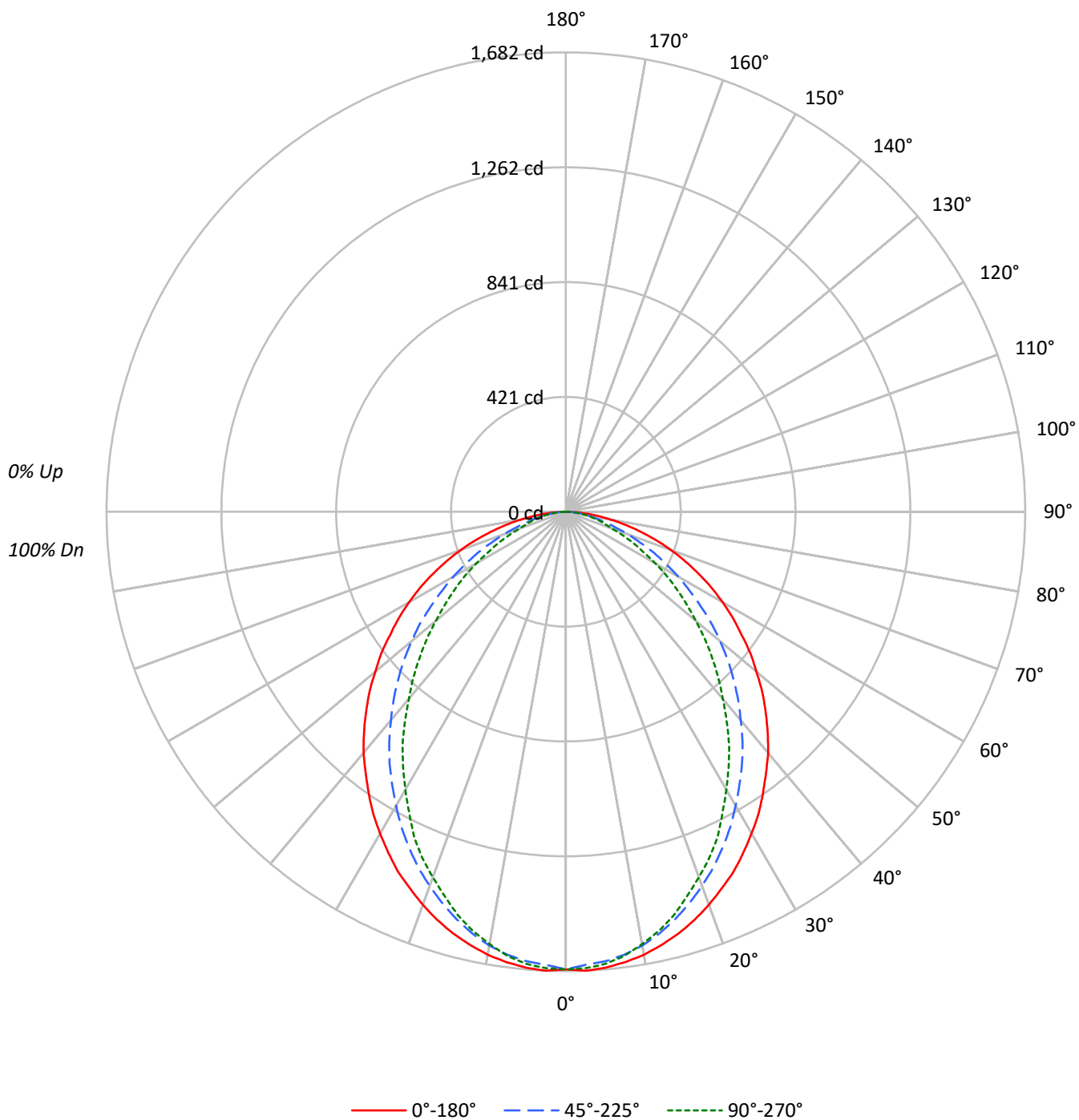
Lumens per Lamp: N/A
Luminaire Lumens: 3785.0 lumens
Efficiency: N/A
Efficacy: 80.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86		
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73		
3	92	82	75	68	90	81	74	68	78	72	67	75	70	66	73	68	64	62		
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54		
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47		
6	73	60	51	45	71	59	51	45	57	50	45	55	49	44	54	48	44	42		
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37		
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34		
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30		
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	34	29	28		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18034	18034	18034
5°	18103	17853	17956
10°	18001	17629	17569
15°	17806	17216	17034
20°	17542	16701	16312
25°	17267	16121	15606
30°	16905	15453	14609
35°	16533	14784	13695
40°	16191	13995	12563
45°	15740	13218	11542
50°	15245	12333	10399
55°	14739	11322	9332
60°	14275	10239	8161
65°	13670	9067	6991
70°	12916	7613	5646
75°	11811	5989	5311
80°	10525	5306	4885
85°	8892	4693	4360

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 15740 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.5	4.2
10°-20°	438.1	11.6
20°-30°	630.8	16.7
30°-40°	710.4	18.8
40°-50°	679.5	18.0
50°-60°	556.3	14.7
60°-70°	375.0	9.9
70°-80°	188.1	5.0
80°-90°	49.2	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°	1226.5	32.4
0°-40°	1936.9	51.2
0°-60°	3172.7	83.8
0°-90°	3785.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3785.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1675	1675	1675	1675	1675	
5°	1675	1669	1652	1664	1662	159
15°	1598	1583	1545	1538	1529	450
25°	1454	1420	1357	1329	1314	669
35°	1258	1209	1125	1067	1042	788
45°	1034	973	868	791	758	798
55°	785	719	603	524	497	704
65°	537	462	356	289	274	531
75°	284	219	144	130	128	303
85°	72	42	38	35	35	83
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1675.4	1675.4	1675.4	1675.4	1675.4
2.5°	1682.2	1676.7	1660.4	1675.4	1672.7
5°	1675.4	1668.6	1652.3	1664.5	1661.8
7.5°	1663.2	1656.4	1636.0	1644.1	1640.1
10°	1646.9	1637.3	1612.9	1614.2	1607.4
12.5°	1623.8	1612.9	1581.6	1580.3	1572.1
15°	1597.9	1583.0	1544.9	1538.2	1528.6
17.5°	1566.7	1550.4	1502.8	1489.2	1475.6
20°	1531.4	1509.6	1458.0	1440.3	1424.0
22.5°	1492.0	1466.1	1410.4	1387.3	1372.4
25°	1453.9	1419.9	1357.4	1328.9	1314.0
27.5°	1407.7	1371.0	1303.1	1265.0	1241.9
30°	1360.1	1319.4	1243.3	1197.1	1175.4
32.5°	1312.6	1265.0	1183.5	1131.9	1108.8
35°	1258.2	1209.3	1125.1	1066.7	1042.2
37.5°	1203.9	1150.9	1062.6	997.4	967.5
40°	1152.3	1092.5	996.0	925.3	894.1
42.5°	1093.8	1034.0	933.5	854.7	827.5
45°	1034.0	972.9	868.3	790.8	758.2
47.5°	975.6	907.7	804.4	720.2	691.6
50°	910.4	846.5	736.5	652.2	621.0
52.5°	852.0	781.3	672.6	584.3	557.1
55°	785.4	718.8	603.3	524.5	497.3
57.5°	725.6	653.6	536.7	462.0	438.9
60°	663.1	588.4	475.6	402.2	379.1
62.5°	600.6	525.9	413.1	345.1	320.7
65°	536.7	462.0	356.0	289.4	274.5
67.5°	472.9	396.8	293.5	243.2	226.9
70°	410.4	337.0	241.9	194.3	179.4
72.5°	347.9	275.8	191.6	154.9	150.8
75°	284.0	218.8	144.0	130.4	127.7
77.5°	225.6	165.8	112.8	104.6	101.9
80°	169.8	114.1	85.6	81.5	78.8
82.5°	116.9	70.7	61.1	57.1	57.1
85°	72.0	42.1	38.0	35.3	35.3
87.5°	32.6	17.7	17.7	16.3	14.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)