

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: P994952

Luminaire Tested: S123RDR-B1165DB30-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P994952
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-B1165DB30-4F0-XX-W2A-F
Description: Define 3 Regressed Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

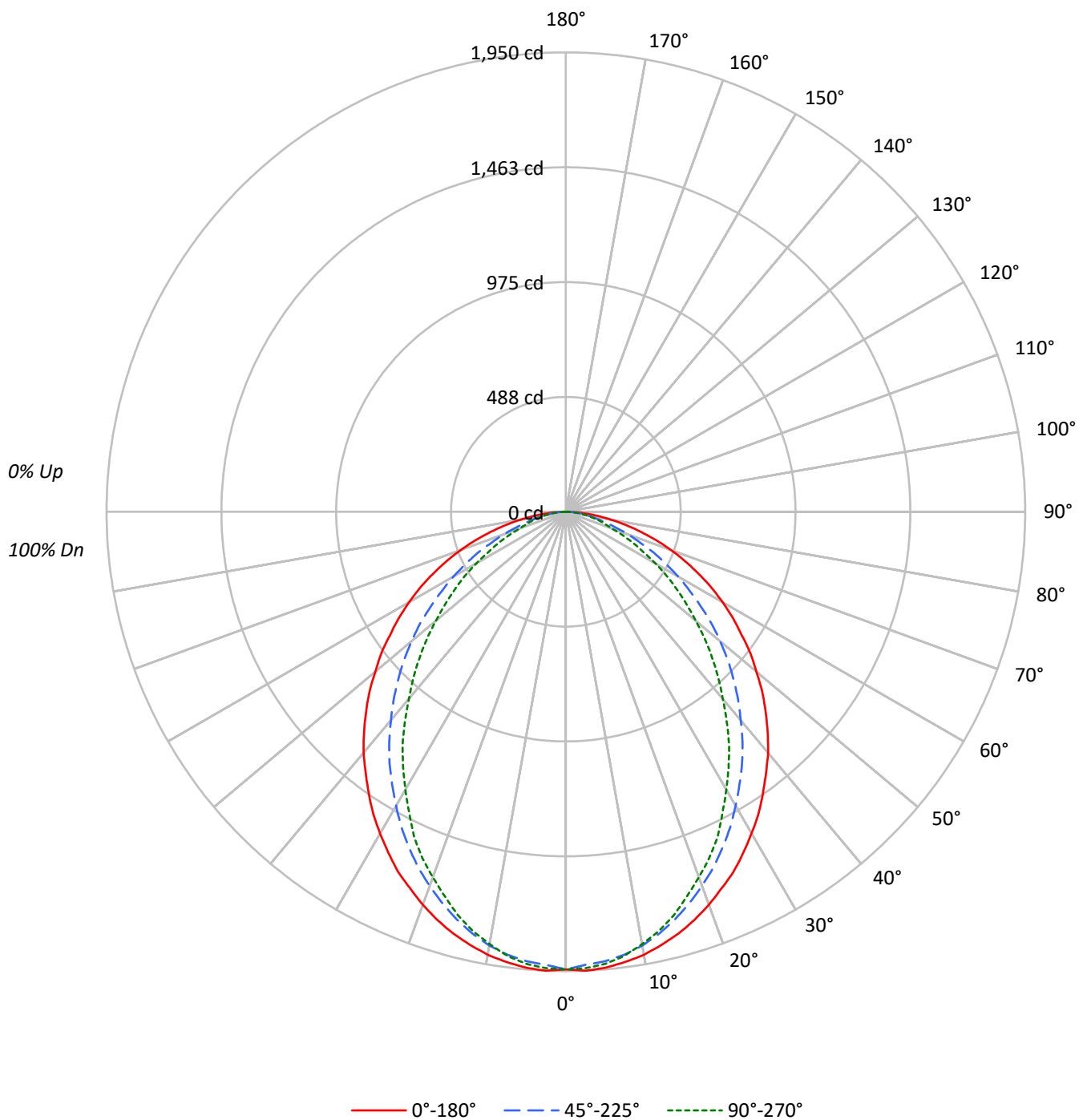
Lumens per Lamp: N/A
Luminaire Lumens: 4388.0 lumens
Efficiency: N/A
Efficacy: 71.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.3
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			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	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°	20907	20907	20907
5°	20987	20697	20816
10°	20867	20437	20368
15°	20644	19959	19749
20°	20336	19362	18911
25°	20018	18690	18092
30°	19598	17915	16936
35°	19168	17139	15876
40°	18770	16225	14564
45°	18249	15323	13381
50°	17673	14297	12055
55°	17087	13125	10819
60°	16548	11868	9461
65°	15847	10511	8104
70°	14971	8825	6543
75°	13691	6945	6159
80°	12205	6149	5666
85°	10312	5446	5064

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 18249 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.6	4.2
10°-20°	507.9	11.6
20°-30°	731.3	16.7
30°-40°	823.6	18.8
40°-50°	787.8	18.0
50°-60°	644.9	14.7
60°-70°	434.8	9.9
70°-80°	218.1	5.0
80°-90°	57.0	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°	1421.8	32.4
0°-40°	2245.4	51.2
0°-60°	3678.1	83.8
0°-90°	4388.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4388.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1942	1942	1942	1942	1942	
5°	1942	1934	1916	1930	1926	184
15°	1852	1835	1791	1783	1772	522
25°	1686	1646	1574	1541	1523	775
35°	1459	1402	1304	1237	1208	913
45°	1199	1128	1007	917	879	925
55°	910	833	699	608	576	817
65°	622	536	413	336	318	616
75°	329	254	167	151	148	351
85°	84	49	44	41	41	97
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1942.3	1942.3	1942.3	1942.3	1942.3
2.5°	1950.2	1943.9	1925.0	1942.3	1939.1
5°	1942.3	1934.4	1915.5	1929.7	1926.5
7.5°	1928.1	1920.2	1896.6	1906.1	1901.3
10°	1909.2	1898.2	1869.8	1871.4	1863.5
12.5°	1882.4	1869.8	1833.6	1832.0	1822.6
15°	1852.5	1835.2	1791.1	1783.2	1772.2
17.5°	1816.3	1797.4	1742.2	1726.5	1710.7
20°	1775.3	1750.1	1690.3	1669.8	1650.9
22.5°	1729.6	1699.7	1635.1	1608.3	1591.0
25°	1685.5	1646.2	1573.7	1540.6	1523.3
27.5°	1632.0	1589.4	1510.7	1466.6	1439.8
30°	1576.8	1529.6	1441.4	1387.8	1362.6
32.5°	1521.7	1466.6	1372.1	1312.2	1285.4
35°	1458.7	1402.0	1304.3	1236.6	1208.2
37.5°	1395.7	1334.2	1231.9	1156.2	1121.6
40°	1335.8	1266.5	1154.7	1072.8	1036.5
42.5°	1268.1	1198.8	1082.2	990.8	959.3
45°	1198.8	1127.9	1006.6	916.8	879.0
47.5°	1131.0	1052.3	932.6	834.9	801.8
50°	1055.4	981.4	853.8	756.1	719.9
52.5°	987.7	905.8	779.8	677.4	645.9
55°	910.5	833.3	699.4	608.1	576.5
57.5°	841.2	757.7	622.2	535.6	508.8
60°	768.7	682.1	551.3	466.3	439.5
62.5°	696.3	609.6	478.9	400.1	371.8
65°	622.2	535.6	412.7	335.5	318.2
67.5°	548.2	460.0	340.3	282.0	263.1
70°	475.7	390.7	280.4	225.3	207.9
72.5°	403.3	319.8	222.1	179.6	174.9
75°	329.2	253.6	167.0	151.2	148.1
77.5°	261.5	192.2	130.7	121.3	118.1
80°	196.9	132.3	99.2	94.5	91.4
82.5°	135.5	81.9	70.9	66.2	66.2
85°	83.5	48.8	44.1	41.0	41.0
87.5°	37.8	20.5	20.5	18.9	17.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)