

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: P1032170

Luminaire Tested: S123RDIW-B1165D755UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032170
REPORT IS A COMBINATION OF REPORTS P994150 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1165D755UB40-4F0-XX-W2A-F
Description: Define 3 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

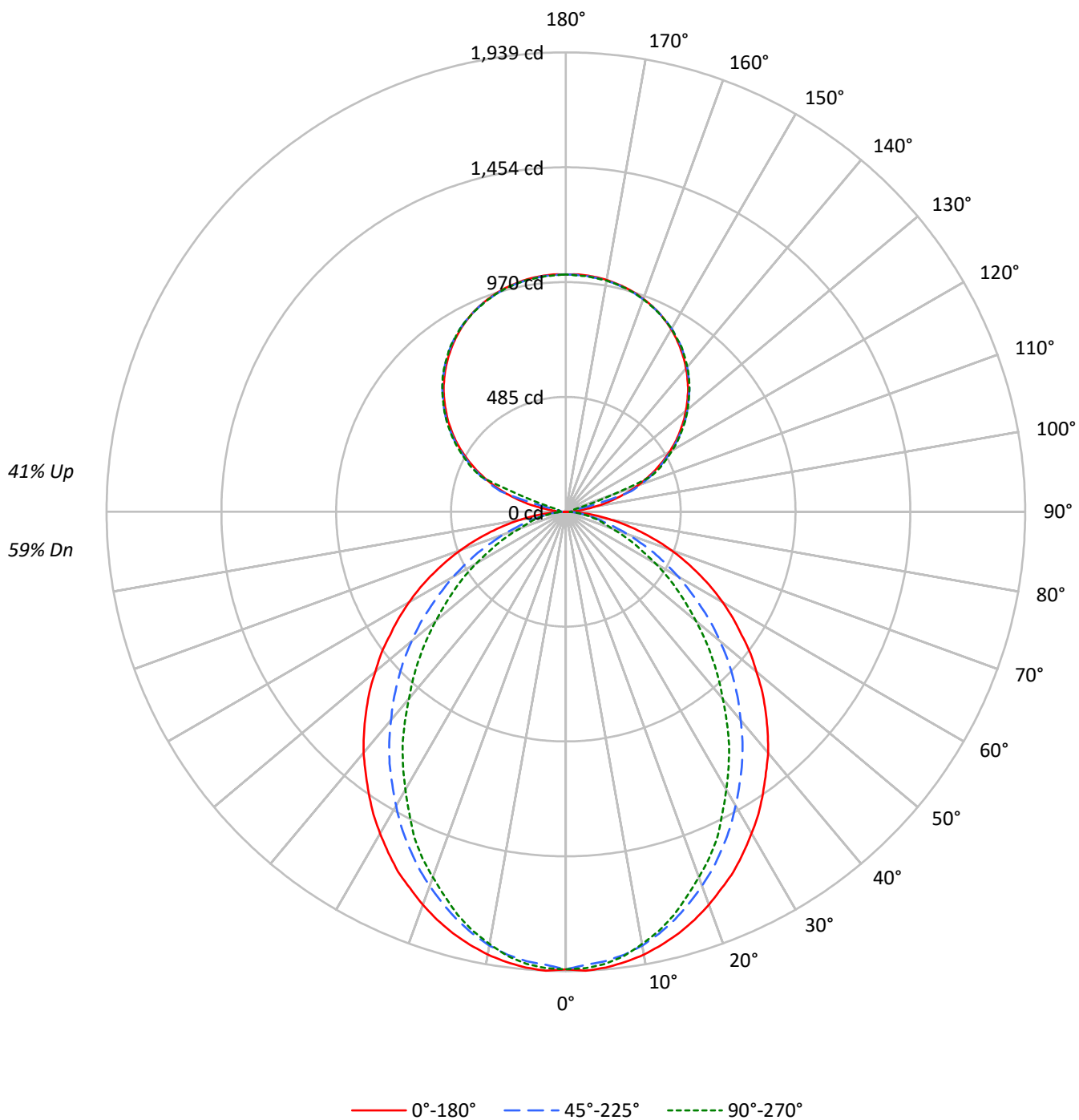
Lumens per Lamp: N/A
Luminaire Lumens: 7419.1 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 84.5
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
RCR																					
0	109	109	109	109		102	102	102	102		88	88	88		76	76	76		64	64	64
1	100	96	92	89		93	90	86	83		78	76	73		67	66	64		57	56	55
2	92	84	78	73		85	79	74	69		69	65	61		60	57	54		51	49	47
3	84	74	67	61		78	70	63	58		61	56	52		53	49	46		46	43	40
4	77	66	58	52		71	62	55	50		54	49	45		47	43	40		41	38	35
5	71	59	51	45		66	56	48	43		49	43	39		43	38	35		37	34	31
6	65	53	45	39		61	50	43	38		44	38	34		39	34	31		34	30	27
7	60	48	40	35		56	45	38	33		40	34	30		35	31	27		31	27	24
8	56	44	36	31		52	41	34	30		37	31	27		33	28	24		28	25	22
9	52	40	33	28		49	38	31	27		34	28	24		30	25	22		26	23	20
10	49	37	30	25		46	35	28	24		31	26	22		28	23	20		24	21	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20787	20787	20787
5°	20821	20052	19998
10°	20657	19298	18918
15°	20390	18367	17735
20°	20038	17353	16413
25°	19675	16299	15161
30°	19210	15180	13680
35°	18731	14079	12332
40°	18279	12884	10842
45°	17701	11715	9503
50°	17064	10467	8117
55°	16403	9131	6847
60°	15771	7762	5557
65°	14956	6356	4338
70°	13929	4806	3101
75°	12454	3254	2456
80°	10630	2262	1722
85°	7973	1222	902

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17701 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	2.4
10°-20°	505.0	6.8
20°-30°	727.2	9.8
30°-40°	818.9	11.0
40°-50°	783.3	10.6
50°-60°	641.2	8.6
60°-70°	432.3	5.8
70°-80°	216.8	2.9
80°-90°	58.7	0.8
90°-100°	35.3	0.5
100°-110°	170.8	2.3
110°-120°	418.5	5.6
120°-130°	531.3	7.2
130°-140°	567.6	7.7
140°-150°	530.8	7.2
150°-160°	428.1	5.8
160°-170°	276.3	3.7
170°-180°	95.2	1.3
0°-30°	1413.8	19.1
0°-40°	2232.6	30.1
0°-60°	3657.2	49.3
0°-90°	4365.0	58.8
90°-120°	624.7	8.4
90°-150°	2254.4	30.4
90°-180°	3054.0	41.2
0°-180°	7419.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1931	1931	1931	1931	1931	
5°	1931	1923	1905	1919	1916	183
15°	1842	1825	1781	1773	1762	519
25°	1676	1637	1565	1532	1515	771
35°	1450	1394	1297	1230	1201	908
45°	1192	1122	1001	912	874	920
55°	905	829	695	605	573	812
65°	619	532	410	334	316	612
75°	327	252	166	150	147	349
85°	83	49	44	41	41	91
90°	1	8	18	21	22	8
95°	45	15	23	28	28	54
105°	222	230	163	31	33	235
115°	416	420	427	435	438	411
125°	586	592	595	597	598	524
135°	730	735	738	740	738	562
145°	842	848	849	851	851	527
155°	928	927	927	931	927	428
165°	979	976	976	982	976	277
175°	1002	998	999	1004	998	95
180°	1002	1002	1002	1002	1002	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1931.2	1931.2	1931.2	1931.2	1931.2
2.5°	1939.1	1932.8	1914.0	1931.2	1928.1
5°	1931.2	1923.4	1904.6	1918.7	1915.6
7.5°	1917.1	1909.3	1885.8	1895.2	1890.5
10°	1898.3	1887.4	1859.2	1860.8	1852.9
12.5°	1871.7	1859.2	1823.2	1821.6	1812.2
15°	1842.0	1824.7	1780.9	1773.0	1762.1
17.5°	1805.9	1787.1	1732.3	1716.7	1701.0
20°	1765.2	1740.1	1680.6	1660.3	1641.5
22.5°	1719.8	1690.0	1625.8	1599.2	1582.0
25°	1675.9	1636.8	1564.7	1531.8	1514.6
27.5°	1622.7	1580.4	1502.1	1458.2	1431.6
30°	1567.9	1520.9	1433.2	1379.9	1354.8
32.5°	1513.0	1458.2	1364.2	1304.7	1278.1
35°	1450.4	1394.0	1296.9	1229.5	1201.3
37.5°	1387.7	1326.6	1224.8	1149.7	1115.2
40°	1328.2	1259.3	1148.1	1066.6	1030.6
42.5°	1260.9	1191.9	1076.0	985.2	953.9
45°	1191.9	1121.5	1000.9	911.6	874.0
47.5°	1124.6	1046.3	927.2	830.1	797.2
50°	1049.4	975.8	848.9	751.8	715.8
52.5°	982.1	900.6	775.3	673.5	642.2
55°	905.3	828.6	695.4	604.6	573.3
57.5°	836.4	753.4	618.7	532.5	505.9
60°	764.3	678.2	548.2	463.6	437.0
62.5°	692.3	606.2	476.2	397.8	369.6
65°	618.7	532.5	410.4	333.6	316.4
67.5°	545.1	457.4	338.3	280.4	261.6
70°	473.0	388.4	278.8	224.0	206.8
72.5°	401.0	318.0	220.8	178.6	173.9
75°	327.4	252.2	166.0	150.4	147.2
77.5°	260.0	191.1	130.0	120.6	117.5
80°	195.8	131.6	98.7	94.0	90.8
82.5°	134.7	81.4	70.5	65.8	65.8
85°	83.0	48.6	43.9	40.7	40.7
87.5°	37.6	20.4	20.4	18.8	17.2
90°	0.7	8.2	17.9	20.8	22.3
92.5°	17.1	12.7	19.4	24.6	25.3
95°	45.4	14.9	23.1	28.3	28.3
97.5°	82.6	61.8	23.8	29.8	30.5
100°	125.8	140.7	24.6	30.5	31.3
102.5°	174.9	184.6	55.1	30.5	32.0
105°	221.8	230.0	163.0	31.3	32.7
107.5°	271.7	278.4	289.5	174.9	77.4
110°	321.5	327.5	335.7	311.1	204.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	369.2	374.4	382.6	389.2	387.8
115°	416.0	420.5	427.2	434.6	437.6
117.5°	462.2	467.4	471.1	477.1	477.8
120°	504.6	511.3	513.5	519.5	519.5
122.5°	547.8	553.0	556.0	559.7	560.4
125°	586.5	592.4	595.4	596.9	598.4
127.5°	625.2	631.1	634.9	637.1	635.6
130°	660.9	666.9	669.8	672.8	671.3
132.5°	695.1	701.1	703.3	706.3	704.1
135°	730.1	734.6	737.6	739.8	737.6
137.5°	759.9	765.8	767.3	771.1	769.6
140°	789.7	794.1	796.4	799.3	797.8
142.5°	817.2	821.7	823.9	826.1	823.9
145°	842.5	847.7	849.2	850.7	850.7
147.5°	867.1	870.8	872.3	873.8	870.0
150°	889.4	891.6	893.1	894.6	892.4
152.5°	909.5	910.2	911.0	914.0	910.2
155°	928.1	926.6	927.3	931.1	926.6
157.5°	943.0	943.0	942.2	946.7	940.7
160°	956.4	955.6	954.9	959.4	954.1
162.5°	969.0	966.8	966.1	971.3	966.8
165°	978.7	976.5	975.7	981.7	976.5
167.5°	986.9	983.9	983.9	989.9	983.9
170°	993.6	990.6	990.6	996.6	990.6
172.5°	998.1	994.3	995.1	1001.0	994.3
175°	1001.8	998.1	998.8	1004.0	998.1
177.5°	1003.3	999.5	1000.3	1006.2	998.8
180°	1001.8	1001.8	1001.8	1001.8	1001.8

(END OF REPORT)