

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: P1031779

Luminaire Tested: S123DIW-B560D1535UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031779
REPORT IS A COMBINATION OF REPORTS P991705 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D1535UB50-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

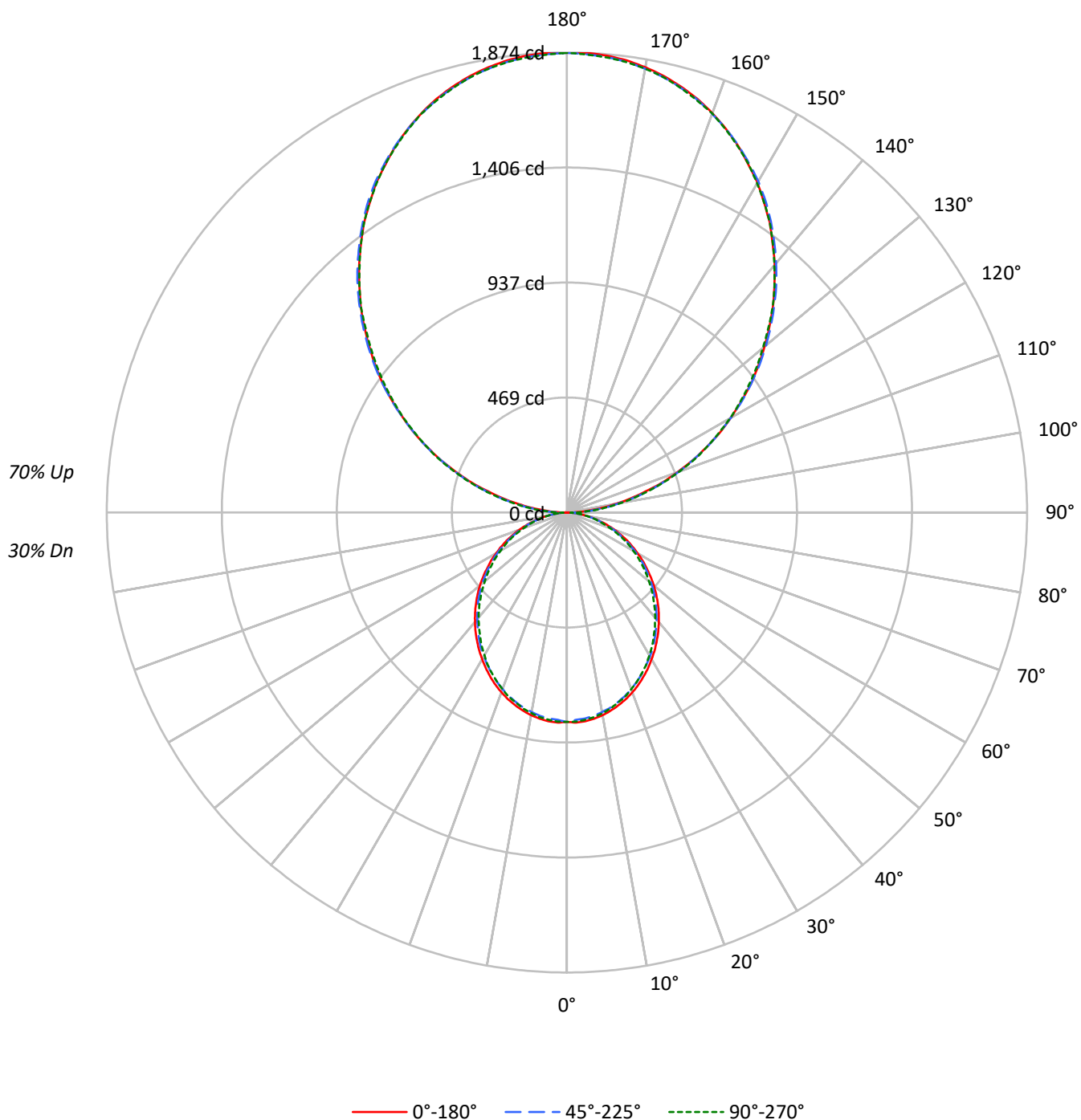
Lumens per Lamp: N/A
Luminaire Lumens: 7413.0 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 76.2
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	38	38	38
1	93	89	85	82	84	80	77	74	63	61	59	48	46	45	33	32	32
2	85	78	72	67	76	70	65	61	55	52	49	42	39	37	29	28	27
3	77	68	61	55	69	61	55	51	49	44	41	37	34	32	26	24	23
4	71	60	53	47	63	54	48	43	43	38	35	33	30	27	23	21	19
5	65	54	46	40	58	48	42	36	38	34	30	29	26	23	21	19	17
6	60	48	40	34	53	43	36	32	35	30	26	26	23	20	19	17	15
7	55	43	35	30	49	39	32	28	31	26	23	24	20	18	17	15	13
8	51	39	31	26	46	35	29	24	28	24	20	22	18	16	16	13	12
9	47	35	28	23	42	32	26	21	26	21	18	20	17	14	14	12	11
10	44	32	25	21	40	29	23	19	24	19	16	18	15	13	13	11	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9182	9182	9182
5°	9204	8865	8852
10°	9122	8564	8477
15°	8996	8253	8069
20°	8851	7906	7664
25°	8663	7541	7232
30°	8457	7162	6776
35°	8241	6776	6324
40°	8015	6370	5880
45°	7767	5975	5415
50°	7514	5535	4949
55°	7190	5075	4476
60°	6857	4569	3974
65°	6541	4021	3449
70°	6090	3413	2837
75°	5440	2703	2202
80°	4696	1900	1557
85°	3660	1022	780

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7767 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.4	1.1
10°-20°	227.1	3.1
20°-30°	335.4	4.5
30°-40°	391.7	5.3
40°-50°	393.8	5.3
50°-60°	345.9	4.7
60°-70°	257.6	3.5
70°-80°	146.6	2.0
80°-90°	45.6	0.6
90°-100°	120.6	1.6
100°-110°	364.9	4.9
110°-120°	621.2	8.4
120°-130°	817.2	11.0
130°-140°	918.6	12.4
140°-150°	903.0	12.2
150°-160°	760.3	10.3
160°-170°	506.1	6.8
170°-180°	177.2	2.4
0°-30°	642.8	8.7
0°-40°	1034.5	14.0
0°-60°	1774.1	23.9
0°-90°	2224.0	30.0
90°-120°	1106.6	14.9
90°-150°	3745.4	50.5
90°-180°	5189.0	70.0
0°-180°	7413.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	853	853	853	853	853	
5°	854	850	842	849	848	81
15°	813	810	800	806	802	229
25°	738	734	724	725	722	340
35°	638	634	624	620	616	399
45°	523	520	510	502	498	404
55°	397	396	386	378	375	355
65°	271	267	260	254	252	267
75°	143	140	138	134	132	153
85°	38	37	37	35	35	41
90°	2	16	35	41	44	9
95°	87	97	109	115	115	96
105°	331	334	347	347	350	354
115°	625	630	627	628	627	619
125°	915	920	916	911	905	816
135°	1187	1196	1195	1189	1186	915
145°	1440	1443	1448	1446	1440	900
155°	1649	1649	1651	1656	1646	759
165°	1796	1792	1792	1801	1790	507
175°	1868	1862	1862	1871	1861	178
180°	1873	1873	1873	1873	1873	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	853.0	853.0	853.0	853.0	853.0
2.5°	856.7	853.7	845.7	853.0	852.3
5°	853.7	850.1	842.0	849.3	847.9
7.5°	847.1	843.5	835.4	842.0	841.3
10°	838.3	834.7	825.1	831.7	830.3
12.5°	826.6	823.7	814.9	819.3	818.5
15°	812.7	809.7	800.2	806.1	801.7
17.5°	797.3	793.6	784.1	788.5	787.0
20°	779.7	775.3	765.7	768.7	766.5
22.5°	759.9	755.5	745.9	748.1	745.2
25°	737.9	733.5	723.9	724.7	722.5
27.5°	715.1	710.7	700.4	701.2	699.0
30°	690.2	686.5	676.2	676.2	671.1
32.5°	665.2	660.1	652.8	647.6	645.4
35°	638.1	633.7	624.2	619.8	616.1
37.5°	611.0	605.1	595.6	590.4	588.2
40°	582.4	578.0	567.7	561.8	558.9
42.5°	553.8	548.6	538.4	532.5	529.6
45°	523.0	520.0	510.5	501.7	498.0
47.5°	492.9	488.5	479.7	470.9	467.9
50°	462.1	458.4	448.9	440.8	436.4
52.5°	429.8	427.6	417.3	410.7	406.3
55°	396.8	396.1	386.5	378.5	374.8
57.5°	366.0	363.1	355.7	348.4	344.0
60°	332.3	331.5	322.7	316.1	312.5
62.5°	302.2	300.0	291.2	284.6	282.4
65°	270.6	267.0	259.6	253.8	251.6
67.5°	236.9	234.0	228.1	223.0	220.0
70°	206.8	202.4	198.0	192.9	189.2
72.5°	175.3	172.4	167.2	162.8	161.4
75°	143.0	140.1	137.9	134.2	132.0
77.5°	114.4	113.0	110.0	107.1	107.1
80°	86.5	84.3	82.9	82.1	82.1
82.5°	59.4	59.4	59.4	57.9	57.2
85°	38.1	36.7	36.7	35.2	35.2
87.5°	19.1	16.9	16.1	15.4	15.4
90°	1.5	16.2	35.3	41.2	44.1
92.5°	44.1	53.0	61.8	66.2	63.3
95°	86.8	97.1	108.9	114.7	114.7
97.5°	142.7	150.1	158.9	166.2	164.8
100°	200.1	208.9	216.3	220.7	223.6
102.5°	266.3	270.7	281.0	285.4	283.9
105°	331.0	333.9	347.2	347.2	350.1
107.5°	407.5	409.0	414.9	419.3	417.8
110°	478.1	481.1	484.0	489.9	486.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	551.7	553.1	553.1	560.5	560.5
115°	625.2	629.6	626.7	628.2	626.7
117.5°	700.3	701.7	698.8	698.8	694.4
120°	769.4	778.2	770.9	769.4	766.5
122.5°	841.5	847.4	844.4	840.0	835.6
125°	915.0	919.5	916.5	910.6	904.7
127.5°	982.7	991.5	988.6	979.8	973.9
130°	1050.4	1062.2	1057.7	1051.9	1041.6
132.5°	1118.1	1129.8	1126.9	1119.5	1112.2
135°	1187.2	1196.0	1194.6	1188.7	1185.7
137.5°	1250.5	1257.8	1262.2	1254.9	1250.5
140°	1316.7	1324.0	1325.5	1324.0	1313.7
142.5°	1377.0	1384.3	1387.3	1385.8	1378.4
145°	1440.2	1443.2	1447.6	1446.1	1440.2
147.5°	1494.7	1500.6	1505.0	1505.0	1496.1
150°	1552.0	1555.0	1557.9	1557.9	1549.1
152.5°	1599.1	1603.5	1605.0	1607.9	1600.6
155°	1649.1	1649.1	1650.6	1656.5	1646.2
157.5°	1691.8	1690.3	1691.8	1697.7	1688.9
160°	1731.5	1728.6	1728.6	1735.9	1730.0
162.5°	1766.8	1762.4	1763.9	1771.2	1760.9
165°	1796.2	1791.8	1791.8	1800.7	1790.4
167.5°	1821.3	1815.4	1816.8	1825.7	1816.8
170°	1841.9	1836.0	1836.0	1846.3	1836.0
172.5°	1858.0	1852.2	1852.2	1861.0	1850.7
175°	1868.3	1862.4	1862.4	1871.3	1861.0
177.5°	1874.2	1868.3	1868.3	1877.2	1866.9
180°	1872.7	1872.7	1872.7	1872.7	1872.7

(END OF REPORT)