

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: P1030889

Luminaire Tested: S123DIW-B560D1320UB2750-4F0-XX-W2A-F1_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1030889
REPORT IS A COMBINATION OF REPORTS P991598 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D1320UB2750-4F0-XX-W2A-F1_5000K
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

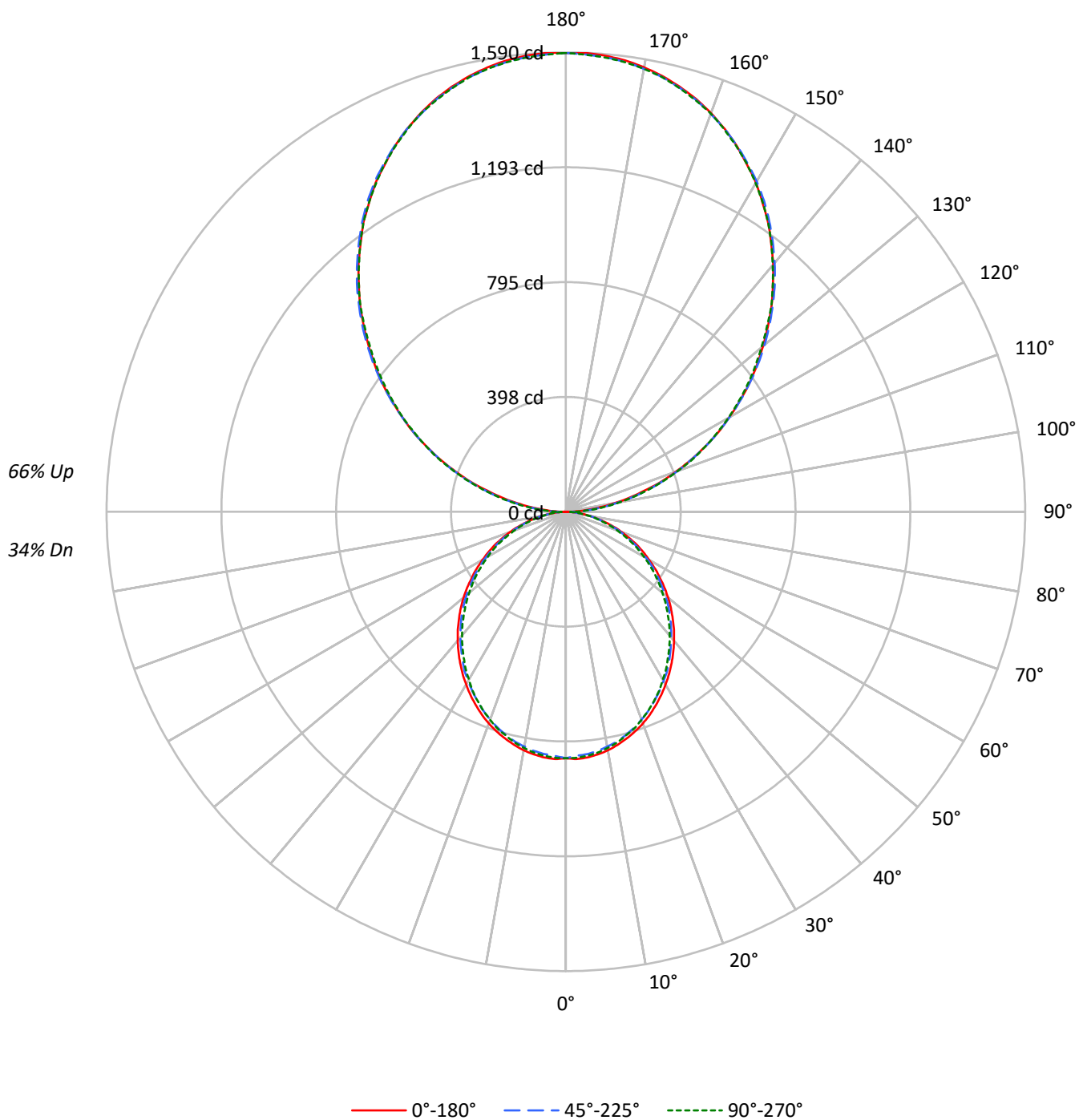
Lumens per Lamp: N/A
Luminaire Lumens: 6624.0 lumens
Efficiency: N/A
Efficacy: 100.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 66.1
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41			34
1	94	90	86	83	85	81	78	75	65	63	61	50	49	47	36	35	35			28
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	32	30	29			24
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	26	25			20
4	71	61	53	47	64	55	48	43	44	40	36	34	31	28	25	23	21			17
5	65	54	46	40	59	49	42	37	40	35	31	31	27	25	23	20	18			15
6	60	48	40	35	54	44	37	32	36	30	27	28	24	21	20	18	16			13
7	55	44	36	30	50	40	33	28	32	27	23	25	22	19	19	16	14			12
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13			10
9	48	36	29	24	43	33	26	22	27	22	18	21	18	15	16	13	12			9
10	45	33	26	21	40	30	24	20	25	20	17	19	16	13	15	12	10			8

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	1.2
10°-20°	227.1	3.4
20°-30°	335.4	5.1
30°-40°	391.7	5.9
40°-50°	393.8	5.9
50°-60°	345.9	5.2
60°-70°	257.6	3.9
70°-80°	146.6	2.2
80°-90°	45.0	0.7
90°-100°	102.2	1.5
100°-110°	309.4	4.7
110°-120°	526.8	8.0
120°-130°	693.0	10.5
130°-140°	779.0	11.8
140°-150°	765.8	11.6
150°-160°	644.8	9.7
160°-170°	429.2	6.5
170°-180°	150.3	2.3
0°-30°	642.8	9.7
0°-40°	1034.5	15.6
0°-60°	1774.1	26.8
0°-90°	2223.4	33.6
90°-120°	938.5	14.2
90°-150°	3176.3	48.0
90°-180°	4401.0	66.4
0°-180°	6624.0	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°	1	14	30	35	37	8
95°	74	82	92	97	97	81
105°	281	283	294	294	297	301
115°	530	534	532	533	532	525
125°	776	780	777	772	767	692
135°	1007	1014	1013	1008	1006	776
145°	1221	1224	1228	1226	1221	763
155°	1399	1399	1400	1405	1396	644
165°	1523	1520	1520	1527	1518	430
175°	1584	1580	1580	1587	1578	151
180°	1588	1588	1588	1588	1588	

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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°	1.2	13.7	29.9	34.9	37.4
92.5°	37.4	44.9	52.4	56.1	53.6
95°	73.6	82.3	92.3	97.3	97.3
97.5°	121.0	127.3	134.7	141.0	139.7
100°	169.7	177.2	183.4	187.1	189.6
102.5°	225.8	229.6	238.3	242.0	240.8
105°	280.7	283.2	294.4	294.4	296.9
107.5°	345.6	346.8	351.8	355.6	354.3
110°	405.5	408.0	410.5	415.5	413.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	467.9	469.1	469.1	475.3	475.3
115°	530.2	534.0	531.5	532.7	531.5
117.5°	593.9	595.1	592.6	592.6	588.9
120°	652.5	660.0	653.7	652.5	650.0
122.5°	713.6	718.6	716.1	712.4	708.6
125°	776.0	779.8	777.3	772.3	767.3
127.5°	833.4	840.9	838.4	830.9	825.9
130°	890.8	900.8	897.0	892.0	883.3
132.5°	948.2	958.2	955.7	949.4	943.2
135°	1006.8	1014.3	1013.1	1008.1	1005.6
137.5°	1060.5	1066.7	1070.5	1064.2	1060.5
140°	1116.6	1122.9	1124.1	1122.9	1114.1
142.5°	1167.8	1174.0	1176.5	1175.3	1169.0
145°	1221.4	1223.9	1227.7	1226.4	1221.4
147.5°	1267.6	1272.6	1276.3	1276.3	1268.8
150°	1316.2	1318.7	1321.2	1321.2	1313.7
152.5°	1356.2	1359.9	1361.1	1363.6	1357.4
155°	1398.6	1398.6	1399.8	1404.8	1396.1
157.5°	1434.8	1433.5	1434.8	1439.7	1432.3
160°	1468.4	1465.9	1465.9	1472.2	1467.2
162.5°	1498.4	1494.6	1495.9	1502.1	1493.4
165°	1523.3	1519.6	1519.6	1527.1	1518.3
167.5°	1544.5	1539.6	1540.8	1548.3	1540.8
170°	1562.0	1557.0	1557.0	1565.8	1557.0
172.5°	1575.7	1570.7	1570.7	1578.2	1569.5
175°	1584.5	1579.5	1579.5	1587.0	1578.2
177.5°	1589.5	1584.5	1584.5	1592.0	1583.2
180°	1588.2	1588.2	1588.2	1588.2	1588.2

(END OF REPORT)