

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P997558

Luminaire Tested: SA2XXDP-B1005DB40-4F0-XX-W2A-A

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997558
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDP-B1005DB40-4F0-XX-W2A-A
Description: Define 2 Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

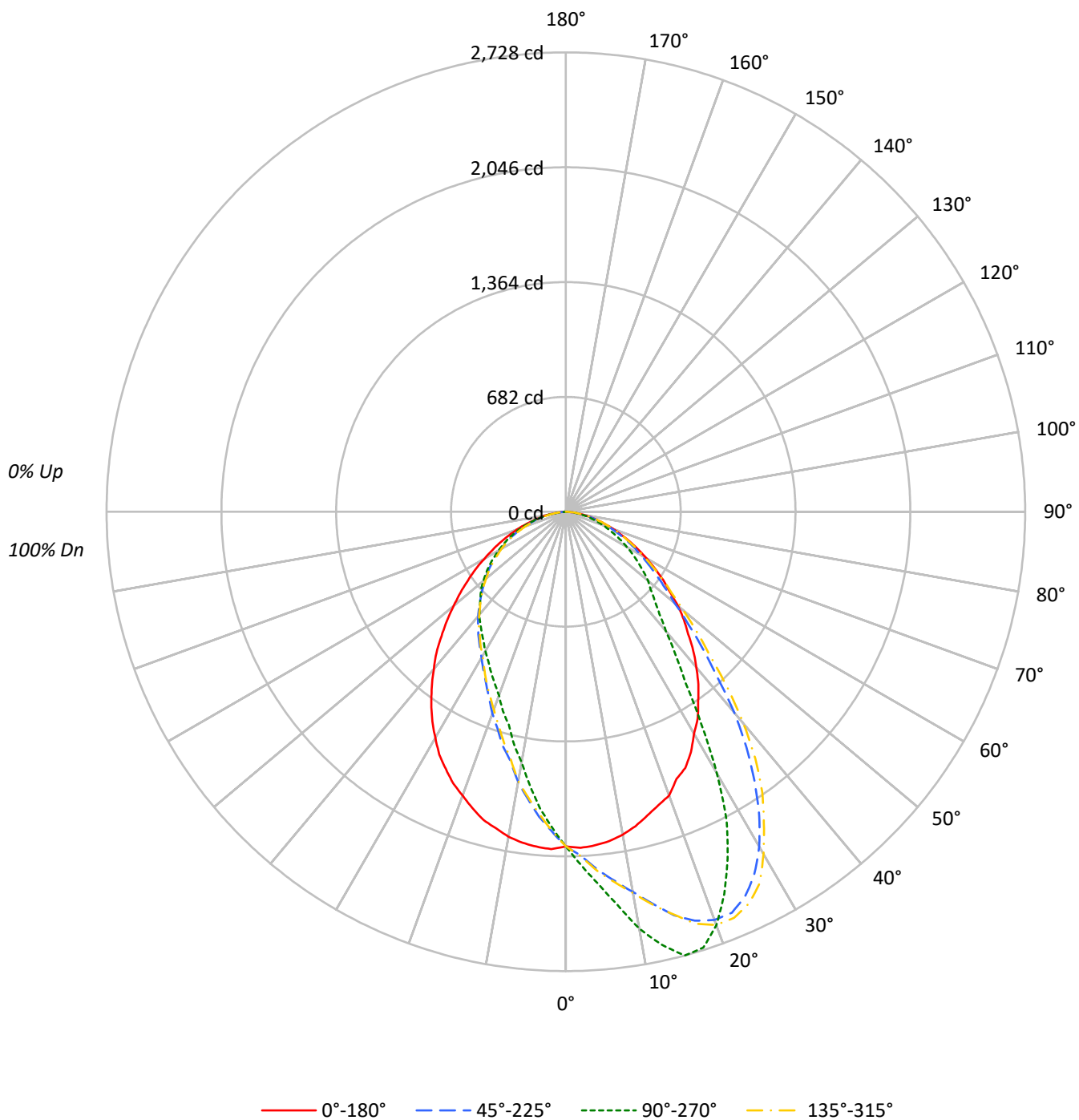
Lumens per Lamp: N/A
Luminaire Lumens: 4384.0 lumens
Efficiency: N/A
Efficacy: 71.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.09 / 1.23
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	98	107	103	100	97	99	96	94		95	93	91		92
2	101	94	87	82	98	92	86	81	88	83	79		85	81	78		82
3	93	83	76	70	90	82	75	69	79	73	68		76	71	67		74
4	86	75	66	60	83	73	66	60	71	64	59		69	63	58		66
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		60
6	74	61	53	47	72	60	52	46	58	51	46		57	51	46		55
7	69	56	48	42	67	55	47	42	54	46	41		52	46	41		51
8	64	51	43	38	63	51	43	38	49	42	37		48	42	37		47
9	60	47	39	34	59	47	39	34	46	39	34		45	38	34		44
10	56	44	36	31	55	43	36	31	42	36	31		41	35	31		41

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	31453	31453	31453	31453
5°	31598	35263	31719	28055
10°	31300	40409	31496	24279
15°	30611	44702	31037	21450
20°	30205	44020	30205	19554
25°	29316	39693	29451	18353
30°	27805	32802	28335	17476
35°	26474	23906	26916	16852
40°	24933	19093	25216	16506
45°	23011	16684	23387	16035
50°	21363	15684	21400	15721
55°	19473	14458	19600	15300
60°	17457	13249	17697	14652
65°	15675	12072	15960	14016
70°	13926	10955	14278	13079
75°	11957	9712	12422	11584
80°	9745	8350	10438	9325
85°	7210	7483	7773	5539

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 155°

Vertical Angle: 45°

Luminance: 41063 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.3	4.3
10°-20°	550.9	12.6
20°-30°	799.5	18.2
30°-40°	842.8	19.2
40°-50°	745.8	17.0
50°-60°	595.5	13.6
60°-70°	404.5	9.2
70°-80°	207.0	4.7
80°-90°	48.9	1.1
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°	1539.6	35.1
0°-40°	2382.4	54.3
0°-60°	3723.7	84.9
0°-90°	4384.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4384.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1987	1987	1987	1987	1987	
5°	1989	2219	1996	1766	1989	189
15°	1868	2728	1894	1309	1868	528
25°	1678	2273	1686	1051	1678	767
35°	1370	1237	1393	872	1370	857
45°	1028	745	1045	716	1028	797
55°	706	524	710	554	706	630
65°	418	322	426	374	418	416
75°	196	159	203	189	196	210
85°	40	41	43	30	40	49
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0
2.5°	1997.7	2002.3	2009.9	2011.5	2026.7	2039.0	2052.7	2052.7	2057.3	2055.8	2043.5
5°	1988.6	2002.3	2022.2	2039.0	2066.5	2078.7	2097.0	2110.7	2123.0	2132.1	2130.6
7.5°	1973.3	1997.7	2026.7	2058.8	2095.5	2116.9	2142.8	2167.3	2184.1	2199.3	2210.0
10°	1947.3	1988.6	2028.3	2071.0	2118.4	2147.4	2177.9	2210.0	2236.0	2265.0	2292.5
12.5°	1912.2	1971.8	2020.6	2077.1	2135.2	2167.3	2216.1	2240.6	2291.0	2364.3	2384.1
15°	1867.9	1948.9	1994.7	2066.5	2142.8	2168.8	2236.0	2275.7	2379.6	2425.4	2480.4
17.5°	1826.7	1916.8	1977.9	2060.3	2135.2	2185.6	2251.3	2332.2	2419.3	2484.9	2546.0
20°	1793.1	1880.1	1953.4	2045.1	2139.8	2203.9	2272.6	2370.4	2465.1	2532.3	2579.6
22.5°	1716.7	1828.2	1913.7	2016.1	2130.6	2219.2	2284.9	2391.8	2494.1	2535.3	2576.6
25°	1678.5	1774.7	1874.0	1990.1	2124.5	2229.9	2286.4	2405.5	2495.6	2510.9	2520.1
27.5°	1608.3	1716.7	1832.8	1965.7	2123.0	2211.5	2283.3	2391.8	2463.6	2452.9	2425.4
30°	1521.2	1654.1	1782.4	1925.9	2101.6	2197.8	2265.0	2364.3	2400.9	2346.0	2297.1
32.5°	1457.1	1582.3	1724.3	1890.8	2077.1	2168.8	2234.5	2312.4	2320.0	2220.7	2138.2
35°	1370.0	1509.0	1669.4	1845.0	2035.9	2118.4	2179.5	2226.8	2190.2	2051.2	1953.4
37.5°	1292.1	1429.6	1600.6	1779.3	1979.4	2060.3	2109.2	2116.9	2026.7	1904.6	1761.0
40°	1206.6	1348.6	1527.3	1715.2	1916.8	1987.0	2017.6	1994.7	1864.8	1722.8	1556.3
42.5°	1121.0	1261.6	1454.0	1646.4	1837.4	1896.9	1909.1	1846.5	1687.7	1521.2	1328.8
45°	1027.9	1174.5	1366.9	1560.9	1745.7	1779.3	1780.8	1690.7	1502.9	1328.8	1150.1
47.5°	951.5	1087.4	1278.4	1472.3	1628.1	1651.0	1641.9	1538.0	1333.3	1137.8	982.1
50°	867.5	997.3	1186.7	1377.6	1510.5	1516.6	1493.7	1345.6	1145.5	966.8	843.1
52.5°	777.4	908.8	1082.9	1266.1	1385.3	1376.1	1331.8	1173.0	985.1	837.0	742.3
55°	705.6	821.7	985.1	1163.8	1247.8	1221.8	1173.0	1011.1	862.9	737.7	655.2
57.5°	626.2	728.5	888.9	1044.7	1093.6	1069.1	1020.2	869.0	731.6	636.9	581.9
60°	551.4	644.5	785.0	914.9	953.0	927.1	870.6	734.6	635.4	555.9	514.7
62.5°	482.6	563.6	681.2	800.3	815.6	789.6	740.7	630.8	545.3	482.6	452.1
65°	418.5	494.8	589.5	679.7	693.4	665.9	615.5	536.1	464.3	424.6	395.6
67.5°	355.9	417.0	501.0	566.6	574.3	548.3	507.1	442.9	398.6	355.9	334.5
70°	300.9	346.7	412.4	465.8	468.9	444.4	423.1	365.0	331.4	300.9	284.1
72.5°	247.4	279.5	329.9	369.6	371.1	355.9	336.0	299.4	270.3	249.0	232.2
75°	195.5	223.0	253.5	288.7	287.1	274.9	259.6	236.7	212.3	198.6	190.9
77.5°	149.7	166.5	190.9	213.8	213.8	207.7	198.6	181.8	166.5	152.7	145.1
80°	106.9	117.6	137.5	145.1	148.1	146.6	139.0	126.8	120.7	110.0	106.9
82.5°	68.7	76.4	85.5	93.2	97.7	94.7	93.2	87.1	77.9	74.8	71.8
85°	39.7	42.8	47.3	51.9	53.5	51.9	55.0	50.4	45.8	45.8	44.3
87.5°	16.8	18.3	21.4	21.4	22.9	22.9	21.4	22.9	22.9	21.4	19.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0
2.5°	2064.9	2066.5	2069.5	2084.8	2092.4	2093.9	2087.8	2101.6	2106.2	2101.6	2098.5
5°	2162.7	2171.8	2190.2	2210.0	2208.5	2210.0	2219.2	2228.3	2231.4	2219.2	2223.8
7.5°	2248.2	2266.5	2286.4	2316.9	2316.9	2332.2	2338.3	2346.0	2364.3	2355.1	2352.1
10°	2346.0	2370.4	2407.0	2455.9	2457.4	2472.7	2488.0	2512.4	2520.1	2514.0	2517.0
12.5°	2468.1	2515.5	2518.5	2572.0	2596.4	2599.5	2623.9	2619.3	2634.6	2634.6	2660.6
15°	2521.6	2594.9	2636.1	2688.1	2703.3	2685.0	2704.9	2726.3	2727.8	2727.8	2726.3
17.5°	2617.8	2646.8	2688.1	2715.6	2721.7	2721.7	2723.2	2732.4	2726.3	2714.0	2723.2
20°	2637.7	2649.9	2665.2	2662.1	2665.2	2649.9	2634.6	2619.3	2620.9	2613.2	2636.1
22.5°	2601.0	2598.0	2562.8	2539.9	2539.9	2509.4	2480.4	2466.6	2452.9	2457.4	2465.1
25°	2509.4	2462.0	2419.3	2385.7	2378.0	2329.2	2289.4	2277.2	2254.3	2272.6	2275.7
27.5°	2362.8	2309.3	2240.6	2211.5	2171.8	2152.0	2124.5	2087.8	2040.5	2068.0	2063.4
30°	2205.4	2126.0	2069.5	1999.3	1936.6	1932.0	1880.1	1819.0	1794.6	1794.6	1808.3
32.5°	2029.8	1924.4	1841.9	1742.7	1681.6	1655.6	1593.0	1531.9	1545.6	1499.8	1516.6
35°	1825.1	1686.2	1582.3	1486.1	1440.3	1409.7	1328.8	1295.2	1258.5	1237.1	1276.8
37.5°	1629.6	1469.3	1336.4	1231.0	1214.2	1159.2	1104.2	1082.9	1061.5	1070.6	1069.1
40°	1391.4	1249.3	1130.2	1047.7	1018.7	992.8	956.1	930.1	916.4	924.0	925.6
42.5°	1176.0	1056.9	968.3	910.3	885.8	867.5	849.2	827.8	823.2	823.2	829.3
45°	1009.6	911.8	852.2	804.9	791.1	777.4	763.7	754.5	751.4	745.3	749.9
47.5°	876.7	798.8	762.1	727.0	711.7	708.7	696.5	691.9	685.8	684.2	685.8
50°	765.2	716.3	682.7	662.9	652.2	647.6	641.5	632.3	629.3	636.9	633.8
52.5°	687.3	641.5	623.1	603.3	597.2	591.1	581.9	583.4	581.9	578.9	578.9
55°	609.4	580.4	562.1	546.8	545.3	539.1	531.5	528.4	526.9	523.9	528.4
57.5°	546.8	523.9	507.1	493.3	487.2	487.2	479.6	473.5	473.5	471.9	473.5
60°	484.2	461.2	450.6	436.8	432.2	430.7	426.1	423.1	418.5	418.5	418.5
62.5°	426.1	407.8	395.6	383.4	384.9	377.2	371.1	368.1	368.1	369.6	369.6
65°	371.1	358.9	343.6	333.0	329.9	328.4	325.3	323.8	319.2	322.3	322.3
67.5°	320.7	303.9	294.8	290.2	285.6	284.1	281.0	278.0	276.4	274.9	278.0
70°	270.3	256.6	249.0	245.9	241.3	239.8	238.3	233.7	235.2	236.7	238.3
72.5°	224.5	212.3	210.8	201.6	201.6	201.6	195.5	198.6	197.0	194.0	197.0
75°	177.2	171.1	168.0	163.4	164.9	163.4	161.9	157.3	157.3	158.8	160.4
77.5°	140.5	134.4	132.9	128.3	125.2	128.3	125.2	123.7	123.7	125.2	125.2
80°	103.9	100.8	96.2	96.2	96.2	94.7	94.7	94.7	93.2	91.6	93.2
82.5°	68.7	68.7	67.2	65.7	67.2	64.1	65.7	65.7	65.7	65.7	65.7
85°	44.3	42.8	42.8	41.2	41.2	41.2	42.8	39.7	39.7	41.2	41.2
87.5°	19.9	19.9	19.9	21.4	19.9	19.9	19.9	21.4	19.9	19.9	19.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0
2.5°	2106.2	2095.5	2086.3	2087.8	2095.5	2089.4	2074.1	2054.2	2046.6	2037.4	2046.6
5°	2232.9	2223.8	2205.4	2207.0	2202.4	2196.3	2171.8	2141.3	2141.3	2116.9	2113.8
7.5°	2358.2	2344.4	2332.2	2329.2	2312.4	2300.1	2278.7	2236.0	2219.2	2190.2	2173.4
10°	2498.7	2488.0	2474.2	2457.4	2448.3	2426.9	2391.8	2329.2	2298.6	2258.9	2229.9
12.5°	2640.7	2639.2	2608.6	2575.0	2573.5	2539.9	2515.5	2431.5	2390.2	2336.8	2268.1
15°	2730.8	2723.2	2706.4	2689.6	2694.2	2657.5	2602.5	2503.3	2475.8	2411.6	2338.3
17.5°	2729.3	2729.3	2724.7	2721.7	2717.1	2706.4	2675.9	2610.2	2565.9	2484.9	2416.2
20°	2642.2	2662.1	2666.7	2665.2	2680.4	2688.1	2686.5	2645.3	2610.2	2538.4	2468.1
22.5°	2468.1	2514.0	2533.8	2546.0	2578.1	2594.9	2634.6	2619.3	2610.2	2556.7	2497.2
25°	2306.2	2321.5	2381.1	2384.1	2428.4	2469.7	2509.4	2535.3	2568.9	2549.1	2498.7
27.5°	2097.0	2132.1	2174.9	2207.0	2216.1	2300.1	2365.8	2414.7	2491.0	2497.2	2480.4
30°	1860.3	1877.1	1947.3	1990.1	2039.0	2100.1	2194.7	2278.7	2347.5	2410.1	2431.5
32.5°	1571.6	1640.3	1681.6	1733.5	1776.3	1884.7	2000.8	2109.2	2188.6	2294.0	2339.8
35°	1307.4	1360.8	1431.1	1452.5	1530.4	1622.0	1773.2	1912.2	2032.9	2139.8	2232.9
37.5°	1089.0	1131.7	1206.6	1240.2	1286.0	1403.6	1530.4	1703.0	1848.0	1979.4	2095.5
40°	939.3	971.4	1027.9	1038.6	1076.8	1183.7	1286.0	1447.9	1640.3	1817.5	1944.3
42.5°	837.0	852.2	890.4	904.2	928.6	1000.4	1092.0	1244.8	1423.5	1606.7	1785.4
45°	763.7	774.3	797.3	809.5	840.0	872.1	946.9	1069.1	1209.6	1394.4	1586.9
47.5°	698.0	711.7	720.9	728.5	745.3	780.5	829.3	919.4	1053.8	1223.4	1409.7
50°	643.0	647.6	664.4	665.9	676.6	699.5	745.3	800.3	907.2	1044.7	1224.9
52.5°	588.0	592.6	603.3	614.0	618.6	636.9	667.4	713.3	792.7	901.1	1061.5
55°	533.0	539.1	549.8	557.5	562.1	577.3	595.7	639.9	702.6	778.9	910.3
57.5°	478.0	491.8	494.8	499.4	507.1	523.9	540.7	566.6	615.5	685.8	782.0
60°	426.1	430.7	441.4	446.0	453.6	462.8	484.2	504.0	539.1	594.1	681.2
62.5°	372.7	383.4	387.9	392.5	398.6	409.3	423.1	444.4	475.0	519.3	588.0
65°	326.8	328.4	337.5	343.6	349.8	357.4	371.1	391.0	409.3	450.6	501.0
67.5°	282.6	285.6	288.7	294.8	302.4	310.0	322.3	333.0	355.9	383.4	423.1
70°	239.8	239.8	247.4	252.0	250.5	259.6	268.8	281.0	297.8	323.8	355.9
72.5°	201.6	200.1	206.2	207.7	210.8	216.9	223.0	235.2	244.4	264.2	288.7
75°	160.4	163.4	166.5	166.5	171.1	175.6	181.8	187.9	198.6	210.8	229.1
77.5°	126.8	126.8	129.8	131.3	135.9	134.4	140.5	146.6	154.3	164.9	178.7
80°	93.2	96.2	96.2	96.2	97.7	99.3	105.4	110.0	114.5	122.2	128.3
82.5°	65.7	65.7	68.7	68.7	68.7	71.8	71.8	73.3	76.4	80.9	85.5
85°	41.2	41.2	41.2	42.8	41.2	42.8	45.8	44.3	45.8	48.9	48.9
87.5°	19.9	19.9	19.9	19.9	19.9	21.4	19.9	21.4	22.9	22.9	22.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P997558

CATALOG NUMBER: SA2XXDP-B1005DB40-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0
2.5°	2039.0	2031.3	2026.7	2029.8	2020.6	1997.7	1997.7	2005.4	1996.2	1987.0	1973.3
5°	2095.5	2080.2	2071.0	2069.5	2048.1	2011.5	2003.8	1996.2	1976.3	1955.0	1932.0
7.5°	2150.5	2123.0	2107.7	2097.0	2066.5	2019.1	1999.3	1982.5	1950.4	1918.3	1889.3
10°	2196.3	2156.6	2138.2	2121.4	2081.7	2022.2	1990.1	1959.5	1918.3	1877.1	1840.4
12.5°	2232.9	2187.1	2164.2	2139.8	2090.9	2013.0	1973.3	1924.4	1883.2	1828.2	1791.5
15°	2294.0	2199.3	2177.9	2155.0	2104.6	1997.7	1948.9	1893.9	1837.4	1764.0	1724.3
17.5°	2342.9	2216.1	2214.6	2165.7	2100.1	1991.6	1916.8	1845.0	1783.9	1710.6	1648.0
20°	2371.9	2242.1	2217.7	2167.3	2084.8	1950.4	1872.5	1793.1	1727.4	1638.8	1576.2
22.5°	2396.4	2278.7	2214.6	2153.5	2052.7	1936.6	1822.1	1747.2	1657.1	1560.9	1501.3
25°	2405.5	2286.4	2219.2	2148.9	2029.8	1896.9	1767.1	1686.2	1585.3	1498.3	1417.3
27.5°	2407.0	2284.9	2202.4	2129.1	1997.7	1845.0	1712.1	1626.6	1515.1	1414.3	1333.3
30°	2391.8	2268.1	2193.2	2113.8	1967.2	1797.6	1644.9	1550.2	1431.1	1330.3	1246.3
32.5°	2346.0	2234.5	2173.4	2086.3	1927.5	1732.0	1580.8	1475.4	1350.1	1250.9	1169.9
35°	2269.6	2193.2	2126.0	2045.1	1875.5	1670.9	1516.6	1392.9	1266.1	1171.4	1095.1
37.5°	2174.9	2133.7	2071.0	1991.6	1816.0	1615.9	1444.8	1307.4	1180.6	1089.0	1014.1
40°	2046.6	2057.3	1996.2	1924.4	1745.7	1541.1	1351.7	1220.3	1101.2	1015.7	942.4
42.5°	1907.6	1951.9	1916.8	1848.0	1667.8	1458.6	1282.9	1137.8	1021.8	933.2	872.1
45°	1757.9	1834.3	1812.9	1762.5	1586.9	1371.5	1185.2	1044.7	942.4	856.8	803.4
47.5°	1594.5	1703.0	1703.0	1666.3	1496.8	1284.5	1101.2	957.6	856.8	795.7	743.8
50°	1428.0	1550.2	1570.1	1545.6	1396.0	1185.2	998.9	869.0	782.0	722.4	684.2
52.5°	1253.9	1396.0	1432.6	1420.4	1289.1	1090.5	914.9	788.1	708.7	656.7	623.1
55°	1087.4	1252.4	1292.1	1296.7	1174.5	986.6	821.7	710.2	633.8	598.7	569.7
57.5°	930.1	1089.0	1133.3	1140.9	1058.4	892.0	734.6	636.9	568.2	539.1	516.2
60°	795.7	928.6	986.6	1003.4	931.7	782.0	653.7	559.0	507.1	479.6	458.2
62.5°	685.8	792.7	853.8	858.3	826.3	685.8	569.7	490.3	446.0	421.5	410.8
65°	578.9	675.1	711.7	730.1	704.1	594.1	491.8	426.1	391.0	369.6	358.9
67.5°	493.3	554.4	585.0	609.4	583.4	501.0	418.5	365.0	339.1	317.7	311.6
70°	404.7	455.1	478.0	502.5	479.6	417.0	357.4	308.5	285.6	268.8	261.2
72.5°	323.8	363.5	384.9	400.2	386.4	334.5	285.6	252.0	235.2	223.0	218.4
75°	256.6	284.1	296.3	307.0	300.9	261.2	230.6	203.1	187.9	177.2	174.1
77.5°	195.5	215.4	229.1	232.2	224.5	198.6	172.6	155.8	143.6	137.5	134.4
80°	139.0	151.2	158.8	163.4	155.8	145.1	126.8	114.5	103.9	96.2	94.7
82.5°	93.2	99.3	105.4	103.9	100.8	91.6	80.9	74.8	70.3	64.1	64.1
85°	53.5	55.0	58.0	59.6	58.0	51.9	45.8	42.8	39.7	35.1	35.1
87.5°	22.9	24.4	24.4	26.0	22.9	22.9	19.9	16.8	16.8	15.3	13.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P997558

CATALOG NUMBER: SA2XXDP-B1005DB40-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0
2.5°	1965.7	1973.3	1971.8	1956.5	1939.7	1925.9	1900.0	1903.0	1893.9	1895.4	1904.6
5°	1916.8	1916.8	1910.7	1889.3	1861.8	1846.5	1817.5	1809.9	1791.5	1790.0	1788.5
7.5°	1864.8	1857.2	1849.6	1819.0	1785.4	1761.0	1721.3	1712.1	1693.8	1681.6	1675.5
10°	1803.8	1793.1	1777.8	1742.7	1701.4	1670.9	1629.6	1617.4	1582.3	1567.0	1557.9
12.5°	1736.6	1730.4	1706.0	1677.0	1609.8	1576.2	1516.6	1528.8	1493.7	1463.2	1458.6
15°	1669.4	1646.4	1632.7	1585.3	1504.4	1489.1	1441.8	1417.3	1385.3	1360.8	1360.8
17.5°	1603.7	1568.5	1538.0	1487.6	1428.0	1385.3	1350.1	1337.9	1298.2	1273.8	1269.2
20°	1516.6	1476.9	1469.3	1397.5	1356.3	1308.9	1275.3	1244.8	1215.7	1205.0	1197.4
22.5°	1434.1	1388.3	1376.1	1315.0	1273.8	1226.4	1192.8	1171.4	1150.1	1142.4	1128.7
25°	1345.6	1318.1	1299.7	1234.1	1188.2	1144.0	1121.0	1105.8	1085.9	1084.4	1075.2
27.5°	1260.0	1234.1	1215.7	1153.1	1119.5	1078.3	1060.0	1043.2	1032.5	1027.9	1023.3
30°	1186.7	1157.7	1136.3	1090.5	1049.3	1015.7	1000.4	989.7	983.6	976.0	974.4
32.5°	1105.8	1089.0	1060.0	1024.8	992.8	960.7	951.5	943.9	934.7	931.7	930.1
35°	1037.0	1014.1	995.8	956.1	942.4	914.9	904.2	898.1	885.8	882.8	879.7
37.5°	969.8	948.5	928.6	904.2	878.2	862.9	856.8	847.7	841.5	843.1	840.0
40°	902.6	885.8	870.6	844.6	829.3	821.7	809.5	800.3	797.3	798.8	797.3
42.5°	837.0	821.7	812.5	792.7	777.4	769.8	762.1	753.0	757.5	757.5	762.1
45°	777.4	763.7	757.5	742.3	733.1	720.9	713.3	711.7	717.8	716.3	716.3
47.5°	716.3	711.7	704.1	690.3	678.1	670.5	669.0	669.0	675.1	678.1	676.6
50°	669.0	659.8	650.6	639.9	630.8	627.7	623.1	626.2	632.3	632.3	635.4
52.5°	609.4	603.3	600.2	591.1	585.0	585.0	585.0	586.5	591.1	595.7	594.1
55°	557.5	552.9	549.8	545.3	537.6	539.1	537.6	540.7	545.3	549.8	552.9
57.5°	502.5	501.0	497.9	490.3	490.3	488.7	493.3	494.8	502.5	505.5	510.1
60°	453.6	449.0	449.0	442.9	442.9	442.9	447.5	452.1	458.2	459.7	462.8
62.5°	401.7	401.7	400.2	395.6	395.6	400.2	401.7	407.8	410.8	410.8	415.4
65°	352.8	351.3	349.8	351.3	352.8	352.8	357.4	360.4	363.5	365.0	366.6
67.5°	303.9	302.4	305.5	303.9	307.0	313.1	311.6	316.2	320.7	320.7	322.3
70°	258.1	261.2	259.6	262.7	261.2	264.2	268.8	270.3	270.3	271.9	276.4
72.5°	215.4	215.4	215.4	213.8	215.4	218.4	221.5	223.0	226.0	227.6	232.2
75°	174.1	174.1	171.1	174.1	174.1	177.2	180.2	180.2	180.2	183.3	187.9
77.5°	131.3	132.9	131.3	134.4	134.4	135.9	139.0	137.5	140.5	142.0	143.6
80°	96.2	94.7	94.7	94.7	96.2	96.2	99.3	100.8	100.8	105.4	102.3
82.5°	61.1	62.6	61.1	62.6	62.6	64.1	62.6	64.1	65.7	68.7	67.2
85°	35.1	33.6	33.6	35.1	33.6	33.6	35.1	33.6	35.1	33.6	35.1
87.5°	13.7	12.2	12.2	12.2	12.2	10.7	10.7	9.2	9.2	9.2	7.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P997558

CATALOG NUMBER: SA2XXDP-B1005DB40-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0
2.5°	1893.9	1898.4	1887.8	1884.7	1887.8	1877.1	1880.1	1883.2	1883.2	1887.8	1890.8
5°	1783.9	1777.8	1767.1	1764.0	1761.0	1765.6	1762.5	1767.1	1768.6	1779.3	1780.8
7.5°	1675.5	1666.3	1657.1	1648.0	1644.9	1637.3	1644.9	1644.9	1655.6	1652.6	1660.2
10°	1547.2	1545.6	1533.4	1528.8	1522.7	1510.5	1527.3	1522.7	1530.4	1544.1	1547.2
12.5°	1452.5	1435.7	1443.3	1421.9	1429.6	1417.3	1418.9	1418.9	1431.1	1432.6	1429.6
15°	1362.4	1348.6	1328.8	1319.6	1315.0	1308.9	1328.8	1330.3	1321.1	1342.5	1334.9
17.5°	1270.7	1270.7	1252.4	1247.8	1235.6	1241.7	1238.7	1240.2	1237.1	1252.4	1260.0
20°	1191.3	1183.7	1177.6	1179.1	1163.8	1160.8	1157.7	1160.8	1171.4	1182.1	1185.2
22.5°	1127.2	1122.6	1107.3	1110.4	1098.1	1102.7	1099.7	1107.3	1108.8	1108.8	1119.5
25°	1066.1	1060.0	1061.5	1055.4	1050.8	1050.8	1046.2	1050.8	1056.9	1060.0	1061.5
27.5°	1020.2	1015.7	1008.0	1003.4	1006.5	998.9	1005.0	1009.6	1009.6	1006.5	1009.6
30°	965.3	968.3	968.3	953.0	959.2	956.1	960.7	963.7	963.7	965.3	962.2
32.5°	928.6	919.4	917.9	916.4	916.4	910.3	910.3	914.9	916.4	917.9	922.5
35°	879.7	879.7	872.1	876.7	870.6	872.1	870.6	872.1	875.1	870.6	875.1
37.5°	835.4	837.0	833.9	837.0	838.5	835.4	832.4	838.5	835.4	835.4	832.4
40°	797.3	795.7	797.3	797.3	797.3	798.8	795.7	795.7	795.7	792.7	789.6
42.5°	765.2	756.0	759.1	760.6	756.0	756.0	757.5	756.0	760.6	751.4	751.4
45°	719.4	716.3	717.8	717.8	720.9	716.3	719.4	720.9	716.3	714.8	711.7
47.5°	678.1	681.2	678.1	681.2	681.2	684.2	678.1	679.7	681.2	675.1	670.5
50°	636.9	636.9	641.5	639.9	641.5	638.4	638.4	636.9	638.4	635.4	630.8
52.5°	598.7	594.1	601.8	600.2	598.7	597.2	595.7	597.2	594.1	591.1	591.1
55°	551.4	551.4	555.9	557.5	557.5	554.4	551.4	552.9	551.4	549.8	548.3
57.5°	513.2	507.1	510.1	511.6	511.6	507.1	510.1	507.1	507.1	508.6	504.0
60°	464.3	464.3	461.2	465.8	465.8	462.8	462.8	464.3	461.2	459.7	458.2
62.5°	412.4	413.9	418.5	420.0	421.5	418.5	415.4	417.0	417.0	412.4	413.9
65°	368.1	371.1	377.2	375.7	372.7	374.2	371.1	372.7	368.1	369.6	365.0
67.5°	325.3	323.8	325.3	325.3	328.4	326.8	323.8	323.8	322.3	326.8	322.3
70°	279.5	279.5	279.5	279.5	281.0	282.6	279.5	276.4	278.0	274.9	273.4
72.5°	232.2	233.7	232.2	235.2	230.6	233.7	233.7	232.2	230.6	230.6	230.6
75°	187.9	190.9	186.3	187.9	186.3	189.4	187.9	187.9	184.8	183.3	184.8
77.5°	143.6	145.1	142.0	143.6	142.0	143.6	143.6	142.0	142.0	142.0	142.0
80°	102.3	103.9	102.3	100.8	99.3	102.3	99.3	100.8	102.3	100.8	103.9
82.5°	65.7	65.7	64.1	65.7	62.6	62.6	64.1	64.1	62.6	65.7	62.6
85°	32.1	32.1	35.1	32.1	30.5	30.5	30.5	32.1	30.5	33.6	32.1
87.5°	7.6	6.1	7.6	7.6	6.1	6.1	7.6	6.1	7.6	9.2	6.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P997558

CATALOG NUMBER: SA2XXDP-B1005DB40-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0	1987.0
2.5°	1886.2	1898.4	1893.9	1877.1	1896.9	1896.9	1910.7	1910.7	1927.5	1933.6	1942.7
5°	1779.3	1788.5	1796.1	1788.5	1802.2	1823.6	1835.8	1846.5	1869.4	1878.6	1892.3
7.5°	1664.8	1681.6	1689.2	1689.2	1712.1	1736.6	1761.0	1776.3	1808.3	1820.6	1834.3
10°	1553.3	1573.1	1588.4	1586.9	1625.1	1640.3	1670.9	1706.0	1738.1	1756.4	1776.3
12.5°	1435.7	1446.4	1467.7	1498.3	1507.5	1534.9	1570.1	1614.4	1672.4	1689.2	1718.2
15°	1337.9	1366.9	1383.7	1397.5	1418.9	1444.8	1483.0	1525.8	1583.8	1620.5	1651.0
17.5°	1255.5	1293.6	1304.3	1301.3	1328.8	1368.5	1412.8	1444.8	1496.8	1541.1	1570.1
20°	1188.2	1203.5	1221.8	1229.5	1250.9	1293.6	1336.4	1373.1	1415.8	1450.9	1484.5
22.5°	1121.0	1133.3	1148.5	1162.3	1179.1	1203.5	1244.8	1290.6	1331.8	1365.4	1403.6
25°	1066.1	1073.7	1087.4	1098.1	1116.5	1133.3	1162.3	1212.7	1261.6	1281.4	1315.0
27.5°	1012.6	1018.7	1027.9	1040.1	1049.3	1066.1	1092.0	1133.3	1183.7	1203.5	1249.3
30°	965.3	969.8	979.0	985.1	989.7	1009.6	1029.4	1061.5	1099.7	1127.2	1160.8
32.5°	921.0	925.6	934.7	936.2	942.4	953.0	971.4	1000.4	1034.0	1056.9	1085.9
35°	872.1	875.1	884.3	887.4	892.0	901.1	914.9	936.2	966.8	983.6	1009.6
37.5°	833.9	832.4	838.5	843.1	849.2	853.8	858.3	879.7	902.6	917.9	937.8
40°	792.7	789.6	791.1	797.3	800.3	806.4	806.4	827.8	843.1	855.3	870.6
42.5°	751.4	749.9	746.9	749.9	753.0	754.5	756.0	771.3	786.6	797.3	814.1
45°	710.2	708.7	705.6	707.1	707.1	710.2	714.8	720.9	731.6	740.7	749.9
47.5°	672.0	669.0	664.4	662.9	665.9	665.9	665.9	672.0	682.7	685.8	694.9
50°	632.3	627.7	621.6	618.6	618.6	617.0	620.1	621.6	630.8	633.8	641.5
52.5°	589.5	586.5	580.4	574.3	575.8	572.7	574.3	575.8	578.9	583.4	588.0
55°	546.8	540.7	536.1	534.6	530.0	530.0	525.4	531.5	530.0	531.5	537.6
57.5°	505.5	499.4	491.8	488.7	484.2	482.6	479.6	478.0	479.6	484.2	488.7
60°	456.7	453.6	449.0	444.4	441.4	436.8	433.8	433.8	432.2	432.2	433.8
62.5°	409.3	407.8	401.7	400.2	397.1	394.0	389.5	386.4	386.4	389.5	391.0
65°	363.5	362.0	357.4	355.9	348.2	345.2	343.6	342.1	339.1	339.1	339.1
67.5°	320.7	316.2	316.2	308.5	302.4	299.4	296.3	294.8	294.8	294.8	296.3
70°	273.4	273.4	268.8	264.2	258.1	259.6	255.1	250.5	250.5	247.4	249.0
72.5°	227.6	226.0	221.5	219.9	215.4	210.8	207.7	210.8	206.2	204.7	206.2
75°	183.3	181.8	178.7	175.6	177.2	172.6	168.0	166.5	166.5	163.4	163.4
77.5°	140.5	143.6	137.5	135.9	132.9	129.8	128.3	126.8	126.8	126.8	129.8
80°	97.7	99.3	99.3	96.2	97.7	93.2	93.2	93.2	88.6	90.1	91.6
82.5°	62.6	62.6	61.1	62.6	61.1	61.1	59.6	59.6	58.0	58.0	59.6
85°	35.1	33.6	32.1	35.1	33.6	33.6	32.1	32.1	32.1	32.1	32.1
87.5°	7.6	9.2	9.2	9.2	9.2	10.7	10.7	10.7	12.2	12.2	12.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P997558

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CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	1987.0	1987.0	1987.0	1987.0
2.5°	1950.4	1950.4	1973.3	1997.7
5°	1907.6	1918.3	1955.0	1988.6
7.5°	1866.4	1884.7	1930.5	1973.3
10°	1816.0	1840.4	1896.9	1947.3
12.5°	1767.1	1790.0	1855.7	1912.2
15°	1698.4	1727.4	1797.6	1867.9
17.5°	1629.6	1658.7	1744.2	1826.7
20°	1548.7	1586.9	1683.1	1793.1
22.5°	1473.9	1521.2	1628.1	1716.7
25°	1391.4	1464.7	1564.0	1678.5
27.5°	1318.1	1391.4	1492.2	1608.3
30°	1235.6	1310.4	1414.3	1521.2
32.5°	1156.2	1224.9	1325.7	1457.1
35°	1073.7	1139.4	1237.1	1370.0
37.5°	998.9	1063.0	1169.9	1292.1
40°	925.6	992.8	1084.4	1206.6
42.5°	856.8	916.4	998.9	1121.0
45°	794.2	837.0	913.3	1027.9
47.5°	728.5	766.7	837.0	951.5
50°	667.4	699.5	760.6	867.5
52.5°	607.9	635.4	691.9	777.4
55°	554.4	580.4	621.6	705.6
57.5°	499.4	519.3	559.0	626.2
60°	446.0	464.3	496.4	551.4
62.5°	392.5	407.8	438.3	482.6
65°	345.2	357.4	380.3	418.5
67.5°	299.4	307.0	325.3	355.9
70°	255.1	261.2	276.4	300.9
72.5°	207.7	213.8	230.6	247.4
75°	168.0	169.5	181.8	195.5
77.5°	131.3	129.8	139.0	149.7
80°	90.1	94.7	102.3	106.9
82.5°	61.1	62.6	65.7	68.7
85°	33.6	35.1	35.1	39.7
87.5°	13.7	15.3	15.3	16.8
90°	0.0	0.0	0.0	0.0

TEST NUMBER: P997558

CATALOG NUMBER: SA2XXDP-B1005DB40-4F0-XX-W2A-A

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	23.95	25.47	24.32	25.78	26.10	20.22	21.74	20.58	22.05	22.36
	3H	25.07	26.43	25.45	26.76	27.12	21.63	22.99	22.01	23.32	23.68
	4H	25.39	26.67	25.79	27.02	27.40	22.14	23.42	22.54	23.77	24.14
	6H	25.58	26.76	25.99	27.13	27.52	22.50	23.68	22.91	24.04	24.44
	8H	25.62	26.74	26.05	27.13	27.54	22.61	23.73	23.04	24.12	24.52
	12H	25.64	26.71	26.07	27.09	27.52	22.68	23.76	23.11	24.14	24.57
4H	2H	24.07	25.35	24.47	25.70	26.08	21.02	22.29	21.42	22.64	23.02
	3H	25.40	26.46	25.81	26.86	27.26	22.59	23.65	23.00	24.05	24.46
	4H	25.88	26.83	26.31	27.25	27.69	23.19	24.15	23.63	24.56	25.00
	6H	26.21	27.04	26.66	27.48	27.94	23.65	24.48	24.10	24.92	25.38
	8H	26.28	27.06	26.75	27.50	27.97	23.79	24.57	24.25	25.01	25.48
	12H	26.32	27.02	26.81	27.49	27.97	23.90	24.59	24.38	25.07	25.54
8H	4H	25.96	26.74	26.42	27.18	27.65	23.60	24.38	24.06	24.82	25.29
	6H	26.37	27.01	26.87	27.50	27.98	24.14	24.78	24.64	25.28	25.75
	8H	26.50	27.07	27.01	27.58	28.07	24.34	24.92	24.86	25.43	25.91
	12H	26.59	27.09	27.10	27.59	28.15	24.51	25.01	25.02	25.51	26.07
12H	4H	25.95	26.64	26.43	27.12	27.59	23.66	24.35	24.14	24.83	25.30
	6H	26.36	26.94	26.88	27.45	27.93	24.22	24.79	24.73	25.30	25.79
	8H	26.53	27.04	27.04	27.53	28.09	24.47	24.97	24.98	25.47	26.03