

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: P997684

Luminaire Tested: SA2XXRDP-B1005DB27-4F0-XX-W2A-A

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997684
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-29)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXRDP-B1005DB27-4F0-XX-W2A-A
Description: Define 2 Regressed Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

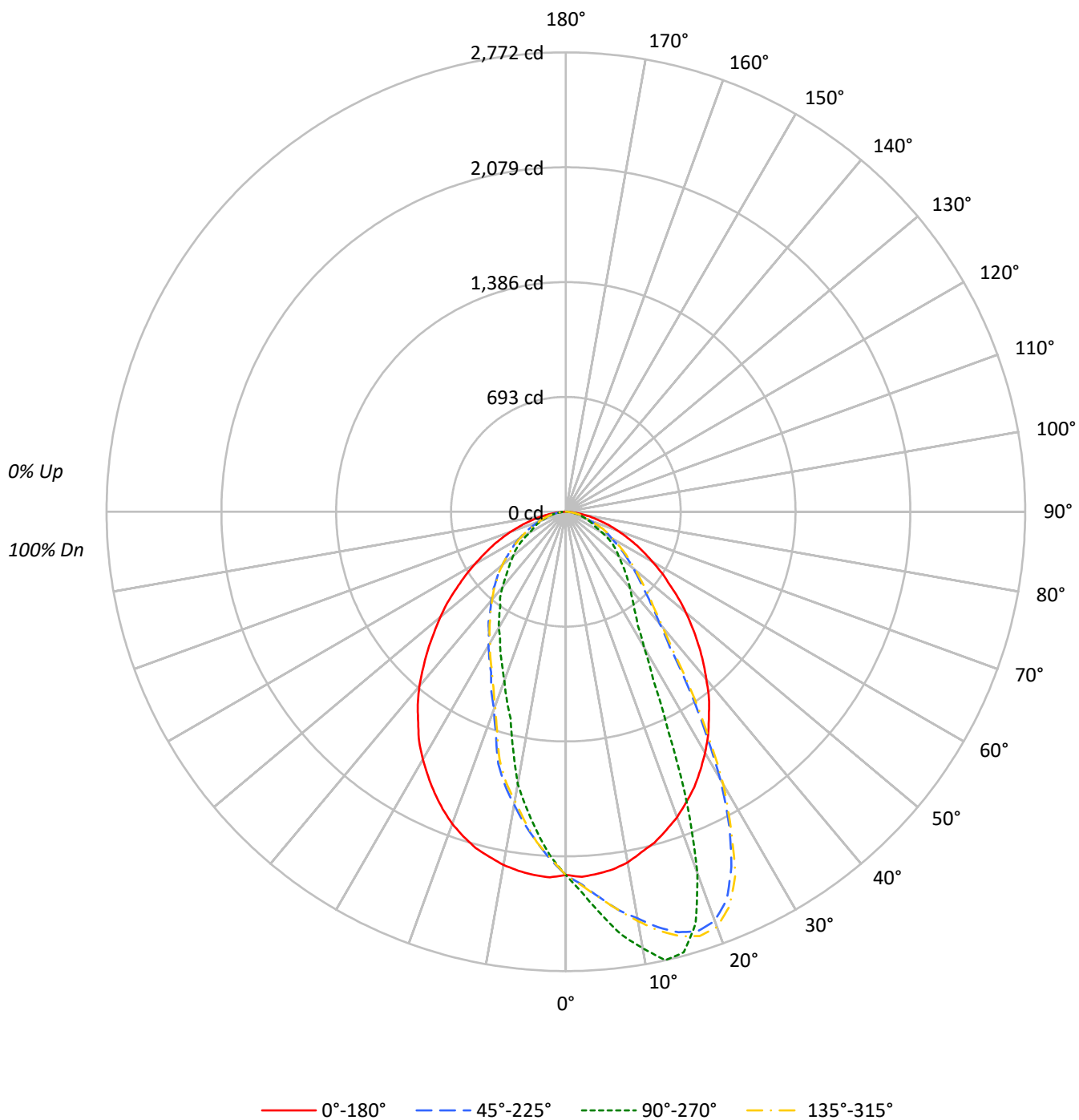
Lumens per Lamp: N/A
Luminaire Lumens: 3787.0 lumens
Efficiency: N/A
Efficacy: 61.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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			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	111	106	103	100	108	104	101	98	100	97	95		96	94	92		93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81		87	83	80		84	81	78	76
3	94	85	78	72	92	84	77	72	81	75	71		78	73	69		76	72	68	66
4	87	77	69	63	85	76	68	63	73	67	62		71	66	61		69	64	60	59
5	81	70	62	56	79	69	61	56	67	60	55		65	59	55		63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49		60	54	49		58	53	49	47
7	71	59	51	45	69	58	50	45	56	50	45		55	49	44		54	48	44	42
8	66	54	46	41	65	53	46	41	52	45	41		51	45	40		50	44	40	39
9	62	50	43	38	61	50	42	37	49	42	37		47	41	37		47	41	37	35
10	59	47	39	35	58	46	39	35	45	39	34		44	38	34		44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	34688	34688	34688	34688
5°	34845	38741	34965	30948
10°	34539	42982	34783	26828
15°	33865	45096	34439	21138
20°	33040	39094	33759	18290
25°	32023	25640	32715	16330
30°	30702	17258	31537	14780
35°	29075	13979	30016	13332
40°	27251	12429	28415	12336
45°	25296	11249	26353	11012
50°	23289	10237	24377	10200
55°	21057	9623	22191	9499
60°	19093	8051	20103	7956
65°	17282	6787	18308	7701
70°	15296	6271	16490	7262
75°	13223	5865	14434	6703
80°	10966	5415	11796	5971
85°	8572	4976	9408	5249

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 160°

Vertical Angle: 45°

Luminance: 38079 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.9	5.5
10°-20°	580.2	15.3
20°-30°	746.7	19.7
30°-40°	708.4	18.7
40°-50°	607.1	16.0
50°-60°	462.3	12.2
60°-70°	291.6	7.7
70°-80°	145.5	3.8
80°-90°	37.4	1.0
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°	1534.7	40.5
0°-40°	2243.1	59.2
0°-60°	3312.6	87.5
0°-90°	3787.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3787.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2191	2191	2191	2191	2191	
5°	2193	2438	2200	1948	2193	208
15°	2066	2752	2102	1290	2066	581
25°	1834	1468	1873	935	1834	842
35°	1505	723	1553	690	1505	941
45°	1130	502	1177	492	1130	872
55°	763	349	804	344	763	688
65°	461	181	489	206	461	458
75°	216	96	236	110	216	234
85°	47	27	52	29	47	57
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°	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4
2.5°	2205.1	2214.2	2218.8	2224.9	2238.6	2247.7	2261.4	2264.5	2263.0	2269.1	2252.3
5°	2192.9	2212.7	2231.0	2246.2	2270.6	2285.8	2302.6	2322.4	2326.9	2349.8	2336.1
7.5°	2176.2	2205.1	2231.0	2261.4	2298.0	2317.8	2343.7	2374.1	2387.8	2415.3	2422.9
10°	2148.8	2189.9	2234.0	2266.0	2316.3	2351.3	2375.7	2424.4	2456.4	2497.5	2491.4
12.5°	2104.6	2157.9	2217.3	2270.6	2336.1	2358.9	2404.6	2454.8	2496.0	2534.0	2567.5
15°	2066.5	2127.4	2192.9	2258.4	2333.0	2375.7	2421.3	2486.8	2531.0	2598.0	2626.9
17.5°	2014.7	2092.4	2170.1	2243.2	2331.5	2380.2	2436.6	2500.5	2566.0	2630.0	2652.8
20°	1961.4	2045.2	2129.0	2227.9	2328.5	2375.7	2433.5	2512.7	2576.7	2626.9	2626.9
22.5°	1897.5	1999.5	2095.5	2189.9	2299.5	2368.0	2427.4	2520.3	2566.0	2576.7	2535.6
25°	1833.5	1935.6	2040.6	2157.9	2282.8	2343.7	2410.7	2497.5	2512.7	2470.1	2363.5
27.5°	1757.4	1871.6	1990.4	2116.8	2247.7	2323.9	2384.8	2442.7	2413.7	2299.5	2133.5
30°	1679.7	1803.1	1937.1	2057.4	2215.8	2285.8	2337.6	2354.3	2263.0	2077.2	1862.5
32.5°	1599.0	1719.3	1860.9	2005.6	2165.5	2232.5	2266.0	2221.9	2054.3	1819.8	1557.9
35°	1504.6	1640.1	1787.8	1938.6	2097.0	2147.2	2167.0	2058.9	1844.2	1541.1	1280.7
37.5°	1419.3	1554.8	1713.2	1867.0	2020.8	2048.2	2028.4	1859.4	1586.8	1286.8	1032.5
40°	1318.8	1463.5	1618.8	1790.9	1917.3	1924.9	1876.2	1656.9	1318.8	1037.1	880.2
42.5°	1225.9	1372.1	1527.4	1702.6	1798.5	1772.6	1707.1	1419.3	1101.0	893.9	767.5
45°	1130.0	1268.5	1436.1	1591.4	1659.9	1599.0	1500.0	1193.9	924.4	769.0	671.6
47.5°	1037.1	1166.5	1332.5	1481.7	1493.9	1425.4	1308.1	1000.5	801.0	676.1	597.0
50°	945.7	1075.1	1230.5	1353.8	1341.6	1247.2	1114.7	869.6	695.9	597.0	531.5
52.5°	854.3	971.6	1122.3	1219.8	1168.0	1076.7	945.7	737.1	607.6	520.8	470.6
55°	763.0	872.6	1002.0	1082.8	1000.5	895.4	802.5	632.0	526.9	456.9	418.8
57.5°	686.8	773.6	892.4	941.1	842.1	759.9	679.2	543.7	456.9	406.6	362.4
60°	603.1	682.2	779.7	808.6	706.6	639.6	571.1	459.9	391.4	347.2	318.3
62.5°	531.5	597.0	671.6	671.6	581.7	531.5	479.7	385.3	328.9	293.9	280.2
65°	461.4	508.6	561.9	555.8	479.7	435.5	394.4	318.3	275.6	251.3	237.6
67.5°	392.9	429.4	464.5	443.2	388.3	350.3	312.2	257.4	228.4	211.7	193.4
70°	330.5	359.4	377.7	357.9	303.0	271.1	243.7	207.1	184.3	162.9	152.3
72.5°	277.2	289.3	295.4	271.1	225.4	207.1	187.3	161.4	141.6	131.0	127.9
75°	216.2	226.9	222.3	204.1	166.0	152.3	137.1	118.8	114.2	108.1	105.1
77.5°	169.0	169.0	161.4	144.7	118.8	108.1	102.0	92.9	88.3	86.8	83.8
80°	120.3	118.8	114.2	95.9	80.7	74.6	74.6	68.5	67.0	64.0	64.0
82.5°	79.2	79.2	73.1	57.9	53.3	51.8	50.3	47.2	47.2	45.7	45.7
85°	47.2	44.2	36.5	32.0	30.5	30.5	28.9	27.4	28.9	27.4	27.4
87.5°	21.3	16.8	12.2	12.2	12.2	12.2	12.2	12.2	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

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4
2.5°	2269.1	2272.1	2276.7	2298.0	2301.0	2307.1	2304.1	2304.1	2305.6	2302.6	2304.1
5°	2366.5	2371.1	2393.9	2419.8	2425.9	2419.8	2427.4	2438.1	2438.1	2438.1	2435.1
7.5°	2457.9	2474.6	2500.5	2538.6	2546.2	2553.8	2567.5	2558.4	2561.4	2575.2	2570.6
10°	2546.2	2570.6	2599.5	2631.5	2648.3	2658.9	2665.0	2678.7	2710.7	2674.1	2687.8
12.5°	2630.0	2665.0	2695.5	2730.5	2742.7	2756.4	2760.9	2773.1	2773.1	2771.6	2782.3
15°	2684.8	2716.8	2744.2	2767.0	2770.1	2767.0	2764.0	2765.5	2770.1	2751.8	2762.5
17.5°	2697.0	2700.0	2709.2	2700.0	2701.6	2669.6	2651.3	2646.7	2604.1	2605.6	2640.6
20°	2637.6	2585.8	2572.1	2521.9	2491.4	2409.2	2406.1	2383.3	2293.4	2320.8	2314.7
22.5°	2474.6	2386.3	2269.1	2211.2	2182.3	2095.5	2028.4	1981.2	1949.3	1917.3	1903.6
25°	2259.9	2116.8	1950.8	1836.6	1819.8	1739.1	1615.8	1557.9	1489.4	1468.0	1504.6
27.5°	1982.8	1797.0	1609.7	1434.5	1402.6	1329.5	1267.0	1225.9	1146.7	1142.1	1145.2
30°	1606.6	1419.3	1262.4	1148.2	1069.0	1035.5	994.4	964.0	932.0	944.2	947.2
32.5°	1320.3	1142.1	995.9	935.0	898.5	877.2	842.1	822.3	808.6	804.1	802.5
35°	1049.2	930.5	865.0	805.6	784.3	769.0	743.2	734.0	721.8	723.4	723.4
37.5°	898.5	799.5	750.8	720.3	700.5	692.9	676.1	667.0	659.4	656.4	660.9
40°	775.1	706.6	676.1	648.7	632.0	628.9	619.8	609.1	600.0	601.5	606.1
42.5°	685.3	645.7	609.1	587.8	575.6	571.1	563.5	555.8	555.8	551.3	549.8
45°	613.7	581.7	551.3	531.5	523.9	517.8	508.6	507.1	501.0	502.5	504.1
47.5°	549.8	523.9	501.0	481.2	473.6	472.1	462.9	456.9	456.9	455.3	453.8
50°	491.9	466.0	446.2	435.5	424.9	421.8	420.3	418.8	415.7	415.7	417.3
52.5°	444.7	418.8	403.6	394.4	388.3	385.3	385.3	383.8	383.8	383.8	382.2
55°	392.9	371.6	359.4	356.3	353.3	351.8	350.3	347.2	345.7	348.7	345.7
57.5°	344.2	336.6	325.9	322.8	315.2	315.2	310.7	307.6	304.6	307.6	307.6
60°	306.1	295.4	289.3	280.2	274.1	268.0	260.4	258.9	255.8	254.3	252.8
62.5°	266.5	257.4	242.1	228.4	219.3	213.2	210.2	208.6	208.6	207.1	207.1
65°	222.3	201.0	193.4	188.8	187.3	185.8	182.7	181.2	182.7	181.2	182.7
67.5°	173.6	170.6	166.0	162.9	161.4	159.9	159.9	158.4	158.4	158.4	158.4
70°	150.8	143.1	141.6	138.6	138.6	137.1	137.1	137.1	137.1	135.5	138.6
72.5°	124.9	120.3	118.8	117.3	117.3	117.3	115.7	115.7	115.7	114.2	115.7
75°	102.0	100.5	97.5	97.5	95.9	97.5	95.9	95.9	94.4	95.9	95.9
77.5°	82.2	80.7	79.2	79.2	77.7	77.7	77.7	77.7	77.7	77.7	79.2
80°	62.4	60.9	59.4	60.9	59.4	60.9	59.4	59.4	60.9	59.4	59.4
82.5°	45.7	44.2	44.2	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
85°	27.4	25.9	25.9	27.4	25.9	27.4	25.9	25.9	25.9	27.4	27.4
87.5°	12.2	13.7	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	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

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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4
2.5°	2310.2	2299.5	2296.5	2299.5	2296.5	2298.0	2287.3	2247.7	2258.4	2241.6	2250.8
5°	2441.1	2432.0	2412.2	2409.2	2406.1	2403.1	2387.8	2352.8	2339.1	2316.3	2314.7
7.5°	2566.0	2566.0	2550.8	2540.1	2526.4	2515.8	2496.0	2444.2	2422.9	2395.5	2380.2
10°	2689.4	2649.8	2666.5	2655.9	2622.4	2616.3	2579.7	2549.3	2508.1	2480.7	2456.4
12.5°	2777.7	2765.5	2750.3	2741.1	2732.0	2712.2	2687.8	2610.2	2588.9	2534.0	2506.6
15°	2774.6	2767.0	2771.6	2771.6	2768.6	2764.0	2744.2	2687.8	2651.3	2598.0	2550.8
17.5°	2625.4	2645.2	2665.0	2678.7	2709.2	2722.9	2741.1	2707.6	2684.8	2639.1	2588.9
20°	2365.0	2413.7	2471.6	2483.8	2511.2	2591.9	2628.5	2657.4	2666.5	2651.3	2610.2
22.5°	2002.6	2043.7	2183.8	2180.7	2220.3	2316.3	2422.9	2509.7	2578.2	2616.3	2601.0
25°	1568.5	1626.4	1701.0	1757.4	1886.8	2030.0	2162.5	2301.0	2419.8	2524.9	2550.8
27.5°	1186.3	1262.4	1321.8	1396.5	1461.9	1631.0	1801.5	2017.8	2156.4	2355.9	2459.4
30°	959.4	994.4	1053.8	1088.8	1120.8	1250.3	1443.7	1656.9	1900.5	2130.5	2308.7
32.5°	819.3	843.7	887.8	903.1	936.6	1023.4	1145.2	1340.1	1591.4	1870.1	2104.6
35°	735.5	761.4	770.6	784.3	811.7	866.5	950.3	1091.9	1318.8	1591.4	1871.6
37.5°	664.0	677.7	703.6	712.7	721.8	763.0	819.3	918.3	1069.0	1292.9	1603.6
40°	613.7	621.3	635.0	642.6	648.7	677.7	727.9	794.9	906.1	1076.7	1363.0
42.5°	560.4	569.5	578.7	587.8	595.4	618.3	648.7	712.7	787.3	916.8	1123.9
45°	508.6	514.7	525.4	531.5	542.1	560.4	587.8	632.0	699.0	781.2	948.7
47.5°	461.4	469.0	473.6	481.2	488.8	508.6	534.5	563.5	618.3	699.0	820.8
50°	418.8	427.9	434.0	435.5	441.6	459.9	481.2	513.2	548.2	610.7	717.3
52.5°	388.3	389.9	394.4	400.5	399.0	409.6	429.4	453.8	490.4	540.6	618.3
55°	353.3	357.9	360.9	362.4	362.4	371.6	382.2	405.1	434.0	475.1	540.6
57.5°	309.1	313.7	322.8	325.9	330.5	335.0	339.6	354.8	379.2	418.8	472.1
60°	263.5	266.5	275.6	281.7	284.8	297.0	303.0	315.2	328.9	357.9	408.1
62.5°	211.7	214.7	219.3	225.4	231.5	249.7	265.0	277.2	287.8	307.6	348.7
65°	184.3	185.8	188.8	190.4	191.9	199.5	213.2	230.0	249.7	265.0	289.3
67.5°	159.9	161.4	162.9	166.0	167.5	169.0	175.1	179.7	199.5	220.8	239.1
70°	137.1	140.1	141.6	141.6	143.1	146.2	149.2	155.3	161.4	172.1	194.9
72.5°	115.7	117.3	120.3	120.3	120.3	123.4	126.4	129.4	132.5	138.6	147.7
75°	95.9	99.0	99.0	99.0	100.5	100.5	103.6	106.6	109.6	114.2	117.3
77.5°	79.2	79.2	79.2	79.2	80.7	80.7	82.2	85.3	86.8	88.3	91.4
80°	59.4	60.9	60.9	60.9	62.4	62.4	62.4	65.5	67.0	67.0	70.1
82.5°	44.2	44.2	44.2	45.7	44.2	45.7	45.7	47.2	45.7	47.2	48.7
85°	27.4	27.4	27.4	28.9	28.9	28.9	28.9	28.9	28.9	28.9	30.5
87.5°	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	15.2	13.7	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: P997684

CATALOG NUMBER: SA2XXRDP-B1005DB27-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4
2.5°	2237.1	2229.5	2229.5	2224.9	2224.9	2200.5	2200.5	2208.1	2199.0	2188.3	2173.1
5°	2294.9	2278.2	2273.6	2267.5	2247.7	2217.3	2205.1	2200.5	2182.3	2159.4	2133.5
7.5°	2349.8	2322.4	2308.7	2294.9	2269.1	2226.4	2202.1	2185.3	2157.9	2122.9	2089.4
10°	2403.1	2368.0	2333.0	2316.3	2279.7	2226.4	2191.4	2164.0	2124.4	2077.2	2030.0
12.5°	2451.8	2378.7	2372.6	2339.1	2285.8	2224.9	2171.6	2132.0	2081.7	2026.9	1972.1
15°	2494.4	2419.8	2383.3	2352.8	2282.8	2206.6	2150.3	2101.5	2034.5	1972.1	1905.1
17.5°	2515.8	2435.1	2410.7	2360.4	2288.9	2189.9	2113.7	2054.3	1981.2	1906.6	1830.5
20°	2537.1	2442.7	2403.1	2368.0	2270.6	2157.9	2072.6	2004.1	1923.4	1835.0	1751.3
22.5°	2547.7	2442.7	2395.5	2346.7	2252.3	2122.9	2022.4	1941.6	1847.2	1757.4	1656.9
25°	2529.5	2433.5	2377.2	2326.9	2220.3	2080.2	1964.5	1873.1	1772.6	1670.6	1568.5
27.5°	2483.8	2412.2	2346.7	2294.9	2176.2	2025.4	1903.6	1800.0	1696.5	1582.3	1478.7
30°	2398.5	2366.5	2314.7	2256.9	2127.4	1976.7	1832.0	1725.4	1611.2	1497.0	1388.8
32.5°	2266.0	2293.4	2259.9	2209.7	2069.6	1909.7	1755.9	1647.7	1522.9	1399.5	1300.5
35°	2104.6	2202.1	2183.8	2148.8	2008.7	1838.1	1684.3	1553.3	1428.4	1303.6	1204.6
37.5°	1927.9	2075.7	2090.9	2069.6	1938.6	1765.0	1596.0	1468.0	1340.1	1213.7	1113.2
40°	1685.8	1912.7	1961.4	1970.6	1865.5	1676.7	1500.0	1375.1	1248.7	1125.4	1003.6
42.5°	1463.5	1749.8	1810.7	1848.8	1772.6	1589.9	1411.7	1273.1	1148.2	1037.1	915.2
45°	1254.8	1553.3	1652.3	1701.0	1667.5	1490.9	1306.6	1177.2	1063.0	960.9	843.7
47.5°	1040.1	1340.1	1478.7	1556.4	1556.4	1390.4	1206.1	1078.2	968.5	881.7	778.2
50°	897.0	1146.7	1289.9	1391.9	1419.3	1288.3	1114.7	989.9	886.3	791.9	712.7
52.5°	764.5	988.3	1107.1	1213.7	1292.9	1178.7	1012.7	900.0	798.0	709.7	647.2
55°	660.9	828.4	936.6	1053.8	1142.1	1067.5	913.7	804.1	715.7	642.6	589.3
57.5°	561.9	708.1	796.5	900.0	994.4	938.1	814.7	720.3	642.6	578.7	531.5
60°	478.2	597.0	665.5	746.2	863.5	823.9	721.8	635.0	572.6	514.7	475.1
62.5°	406.6	501.0	558.9	616.8	723.4	705.1	625.9	558.9	505.6	456.9	423.4
65°	333.5	411.2	456.9	507.1	592.4	600.0	536.0	488.8	440.1	397.5	367.0
67.5°	269.5	330.5	371.6	414.2	482.7	504.1	459.9	420.3	379.2	344.2	316.8
70°	217.8	260.4	290.9	324.4	380.7	406.6	383.8	356.3	322.8	293.9	269.5
72.5°	172.1	199.5	217.8	243.7	289.3	315.2	313.7	289.3	265.0	245.2	225.4
75°	126.4	147.7	162.9	179.7	216.2	240.6	246.7	236.0	211.7	196.4	181.2
77.5°	95.9	108.1	115.7	127.9	153.8	175.1	184.3	181.2	164.5	152.3	141.6
80°	73.1	76.1	79.2	83.8	105.1	124.9	131.0	129.4	120.3	115.7	103.6
82.5°	51.8	53.3	54.8	56.3	64.0	80.7	86.8	89.8	82.2	77.7	67.0
85°	30.5	32.0	32.0	35.0	36.5	41.1	51.8	51.8	50.3	44.2	42.6
87.5°	15.2	15.2	13.7	13.7	15.2	16.8	19.8	22.8	19.8	18.3	16.8
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: P997684

CATALOG NUMBER: SA2XXRDP-B1005DB27-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4
2.5°	2167.0	2168.6	2173.1	2159.4	2138.1	2129.0	2101.5	2097.0	2092.4	2092.4	2097.0
5°	2118.3	2112.2	2113.7	2087.8	2057.4	2039.1	2001.0	2007.1	1987.3	1975.1	1978.2
7.5°	2065.0	2048.2	2046.7	2013.2	1975.1	1941.6	1902.1	1892.9	1874.6	1853.3	1844.2
10°	1998.0	1985.8	1963.0	1924.9	1876.2	1848.8	1795.5	1763.5	1758.9	1726.9	1714.7
12.5°	1929.5	1908.1	1885.3	1832.0	1777.2	1733.0	1693.4	1658.4	1634.0	1606.6	1588.3
15°	1850.3	1824.4	1798.5	1742.2	1678.2	1634.0	1574.6	1522.9	1451.3	1394.9	1363.0
17.5°	1763.5	1734.5	1699.5	1637.1	1574.6	1513.7	1404.1	1343.2	1292.9	1259.4	1239.6
20°	1673.6	1641.6	1606.6	1544.2	1436.1	1329.5	1268.5	1221.3	1190.9	1157.4	1133.0
22.5°	1579.2	1545.7	1507.6	1410.2	1296.0	1221.3	1174.1	1130.0	1085.8	1067.5	1055.3
25°	1490.9	1460.4	1411.7	1279.2	1189.4	1120.8	1067.5	1038.6	1015.7	991.4	968.5
27.5°	1399.5	1343.2	1274.6	1163.5	1107.1	1037.1	999.0	977.7	938.1	921.3	910.7
30°	1289.9	1227.4	1161.9	1082.8	1017.3	968.5	933.5	898.5	875.6	858.9	840.6
32.5°	1178.7	1119.3	1078.2	995.9	947.2	897.0	863.5	842.1	808.6	798.0	790.4
35°	1082.8	1032.5	995.9	928.9	883.3	837.6	813.2	781.2	759.9	740.1	727.9
37.5°	988.3	960.9	922.9	866.5	817.8	781.2	747.7	737.1	708.1	697.5	685.3
40°	922.9	881.7	849.8	801.0	759.9	720.3	699.0	674.6	654.8	638.1	633.5
42.5°	843.7	813.2	794.9	741.6	699.0	676.1	650.3	622.8	607.6	593.9	577.2
45°	784.3	756.9	731.0	688.3	650.3	621.3	598.5	580.2	554.3	548.2	522.3
47.5°	721.8	694.4	674.6	632.0	597.0	569.5	552.8	528.4	507.1	493.4	481.2
50°	659.4	636.6	618.3	581.7	551.3	522.3	499.5	475.1	466.0	443.2	435.5
52.5°	600.0	584.8	565.0	530.0	499.5	475.1	450.8	431.0	417.3	405.1	395.9
55°	549.8	525.4	516.2	478.2	452.3	426.4	405.1	392.9	376.1	368.5	360.9
57.5°	493.4	479.7	464.5	435.5	406.6	382.2	367.0	348.7	339.6	330.5	324.4
60°	444.7	424.9	412.7	388.3	362.4	339.6	325.9	312.2	300.0	292.4	280.2
62.5°	388.3	373.1	365.5	339.6	318.3	297.0	284.8	271.1	261.9	248.2	233.0
65°	339.6	327.4	318.3	297.0	277.2	257.4	245.2	228.4	216.2	208.6	207.1
67.5°	297.0	287.8	274.1	254.3	234.5	219.3	205.6	191.9	190.4	187.3	187.3
70°	249.7	240.6	233.0	211.7	194.9	178.2	175.1	170.6	166.0	164.5	161.4
72.5°	208.6	201.0	191.9	173.6	156.9	152.3	149.2	146.2	141.6	140.1	138.6
75°	169.0	158.4	152.3	135.5	131.0	127.9	124.9	120.3	117.3	115.7	112.7
77.5°	129.4	118.8	118.8	109.6	106.6	102.0	99.0	95.9	94.4	91.4	91.4
80°	91.4	91.4	88.3	83.8	79.2	77.7	73.1	71.6	70.1	71.6	68.5
82.5°	67.0	60.9	60.9	57.9	54.8	53.3	50.3	50.3	48.7	48.7	48.7
85°	38.1	38.1	36.5	33.5	32.0	32.0	30.5	30.5	28.9	28.9	27.4
87.5°	15.2	13.7	15.2	13.7	13.7	12.2	12.2	12.2	10.7	12.2	10.7
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: P997684

CATALOG NUMBER: SA2XXRDP-B1005DB27-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4
2.5°	2097.0	2093.9	2084.8	2087.8	2083.3	2083.3	2080.2	2080.2	2080.2	2087.8	2083.3
5°	1982.8	1972.1	1961.4	1956.9	1952.3	1947.7	1947.7	1946.2	1959.9	1956.9	1969.1
7.5°	1841.1	1838.1	1816.8	1816.8	1809.2	1806.1	1813.7	1815.2	1816.8	1819.8	1827.4
10°	1714.7	1707.1	1676.7	1679.7	1675.1	1669.1	1673.6	1670.6	1681.2	1684.3	1681.2
12.5°	1565.5	1551.8	1518.3	1501.5	1483.3	1469.6	1486.3	1474.1	1516.8	1529.0	1562.5
15°	1367.5	1341.6	1318.8	1318.8	1302.0	1289.9	1297.5	1311.2	1320.3	1334.0	1340.1
17.5°	1235.0	1224.4	1206.1	1195.4	1190.9	1186.3	1186.3	1192.4	1212.2	1210.7	1222.9
20°	1122.3	1116.3	1107.1	1093.4	1088.8	1085.8	1085.8	1085.8	1099.5	1111.7	1119.3
22.5°	1044.7	1040.1	1034.0	1015.7	1006.6	1003.6	1011.2	1015.7	1026.4	1035.5	1043.2
25°	967.0	956.4	945.7	939.6	935.0	935.0	938.1	939.6	944.2	948.7	957.9
27.5°	903.1	895.4	880.2	863.5	863.5	858.9	861.9	865.0	875.6	890.9	898.5
30°	831.5	830.0	823.9	817.8	811.7	808.6	814.7	819.3	820.8	828.4	828.4
32.5°	779.7	769.0	758.4	752.3	749.2	747.7	749.2	755.3	755.3	764.5	775.1
35°	727.9	721.8	711.2	700.5	697.5	689.9	695.9	702.0	712.7	717.3	721.8
37.5°	671.6	664.0	659.4	656.4	650.3	651.8	647.2	656.4	665.5	664.0	667.0
40°	628.9	615.2	601.5	600.0	598.5	597.0	597.0	598.5	604.6	610.7	619.8
42.5°	574.1	569.5	557.4	545.2	542.1	539.1	536.0	542.1	554.3	565.0	569.5
45°	517.8	511.7	508.6	499.5	493.4	491.9	488.8	496.5	507.1	511.7	514.7
47.5°	466.0	464.5	455.3	456.9	452.3	453.8	452.3	456.9	456.9	461.4	464.5
50°	431.0	426.4	421.8	418.8	414.2	414.2	412.7	414.2	420.3	426.4	424.9
52.5°	395.9	388.3	386.8	385.3	382.2	385.3	380.7	382.2	388.3	391.4	389.9
55°	354.8	353.3	350.3	347.2	345.7	344.2	344.2	344.2	350.3	354.8	356.3
57.5°	322.8	315.2	309.1	309.1	303.0	301.5	304.6	306.1	310.7	313.7	316.8
60°	278.7	275.6	266.5	261.9	252.8	251.3	251.3	257.4	265.0	275.6	278.7
62.5°	231.5	226.9	225.4	225.4	225.4	225.4	225.4	225.4	225.4	226.9	226.9
65°	205.6	207.1	205.6	204.1	205.6	205.6	204.1	204.1	204.1	205.6	207.1
67.5°	184.3	182.7	184.3	182.7	181.2	181.2	179.7	181.2	182.7	184.3	184.3
70°	159.9	159.9	158.4	159.9	158.4	156.9	155.3	155.3	158.4	159.9	159.9
72.5°	137.1	137.1	135.5	135.5	132.5	132.5	134.0	132.5	132.5	137.1	137.1
75°	114.2	112.7	111.2	111.2	109.6	109.6	109.6	108.1	111.2	111.2	112.7
77.5°	89.8	89.8	89.8	88.3	88.3	86.8	86.8	88.3	88.3	88.3	89.8
80°	68.5	68.5	68.5	67.0	65.5	65.5	65.5	65.5	65.5	67.0	65.5
82.5°	47.2	47.2	47.2	47.2	47.2	45.7	45.7	45.7	47.2	47.2	45.7
85°	28.9	27.4	28.9	28.9	27.4	28.9	27.4	27.4	25.9	25.9	27.4
87.5°	12.2	10.7	9.1	9.1	10.7	9.1	9.1	9.1	10.7	9.1	9.1
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: P997684

CATALOG NUMBER: SA2XXRDP-B1005DB27-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4	2191.4
2.5°	2087.8	2095.5	2092.4	2075.7	2092.4	2097.0	2106.1	2115.3	2121.3	2130.5	2138.1
5°	1956.9	1972.1	1981.2	1972.1	2002.6	2007.1	2028.4	2040.6	2058.9	2074.1	2086.3
7.5°	1833.5	1845.7	1864.0	1867.0	1885.3	1906.6	1937.1	1967.5	1996.5	2011.7	2025.4
10°	1701.0	1722.4	1749.8	1743.7	1771.1	1804.6	1836.6	1885.3	1909.7	1937.1	1961.4
12.5°	1568.5	1582.3	1618.8	1631.0	1670.6	1696.5	1740.6	1771.1	1832.0	1864.0	1885.3
15°	1337.1	1393.4	1439.1	1493.9	1545.7	1594.4	1634.0	1688.9	1742.2	1766.5	1801.5
17.5°	1232.0	1257.9	1285.3	1312.7	1379.7	1466.5	1536.6	1596.0	1641.6	1673.6	1714.7
20°	1122.3	1148.2	1178.7	1204.6	1245.7	1308.1	1394.9	1497.0	1551.8	1585.3	1624.9
22.5°	1044.7	1069.0	1088.8	1111.7	1143.7	1189.4	1254.8	1381.2	1454.3	1495.4	1530.5
25°	960.9	991.4	1012.7	1029.5	1055.3	1105.6	1158.9	1230.5	1361.4	1393.4	1442.1
27.5°	903.1	912.2	936.6	962.4	988.3	1015.7	1070.6	1131.5	1219.8	1289.9	1349.3
30°	834.5	857.4	880.2	890.9	913.7	953.3	986.8	1052.3	1120.8	1175.6	1247.2
32.5°	782.7	796.5	811.7	837.6	858.9	886.3	919.8	974.6	1032.5	1067.5	1122.3
35°	724.9	734.0	766.0	776.7	798.0	825.4	858.9	901.5	964.0	991.4	1031.0
37.5°	670.1	691.4	700.5	724.9	744.7	772.1	796.5	845.2	886.3	918.3	954.8
40°	627.4	636.6	653.3	674.6	691.4	712.7	743.2	778.2	822.3	848.2	880.2
42.5°	575.6	583.3	604.6	616.8	644.2	664.0	682.2	724.9	764.5	784.3	816.3
45°	519.3	537.6	551.3	575.6	590.9	615.2	638.1	668.5	705.1	727.9	746.2
47.5°	470.6	488.8	502.5	525.4	549.8	560.4	584.8	616.8	650.3	668.5	694.4
50°	431.0	437.1	462.9	473.6	499.5	520.8	537.6	565.0	601.5	612.2	633.5
52.5°	392.9	397.5	414.2	427.9	450.8	469.0	490.4	516.2	546.7	563.5	580.2
55°	359.4	362.4	370.1	385.3	400.5	423.4	443.2	467.5	493.4	511.7	526.9
57.5°	321.3	327.4	333.5	342.6	357.9	379.2	400.5	423.4	444.7	456.9	476.7
60°	277.2	286.3	297.0	307.6	318.3	333.5	357.9	379.2	399.0	409.6	424.9
62.5°	230.0	248.2	257.4	269.5	278.7	292.4	310.7	335.0	348.7	362.4	374.6
65°	207.1	208.6	210.2	222.3	239.1	252.8	269.5	287.8	309.1	318.3	327.4
67.5°	184.3	185.8	188.8	190.4	196.4	211.7	230.0	249.7	266.5	272.6	281.7
70°	161.4	161.4	167.5	169.0	170.6	172.1	187.3	207.1	222.3	230.0	240.6
72.5°	137.1	138.6	141.6	143.1	146.2	149.2	153.8	164.5	182.7	190.4	202.5
75°	112.7	114.2	115.7	117.3	121.8	123.4	127.9	134.0	141.6	150.8	158.4
77.5°	89.8	89.8	91.4	94.4	97.5	99.0	103.6	106.6	109.6	114.2	120.3
80°	67.0	68.5	68.5	71.6	71.6	73.1	74.6	79.2	82.2	85.3	88.3
82.5°	45.7	48.7	48.7	48.7	50.3	51.8	53.3	53.3	56.3	57.9	62.4
85°	27.4	28.9	28.9	28.9	27.4	30.5	30.5	32.0	32.0	32.0	33.5
87.5°	10.7	9.1	10.7	10.7	10.7	12.2	10.7	10.7	12.2	13.7	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

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CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	2191.4	2191.4	2191.4	2191.4
2.5°	2151.8	2147.2	2174.6	2205.1
5°	2107.6	2115.3	2150.3	2192.9
7.5°	2062.0	2078.7	2119.8	2176.2
10°	1998.0	2028.4	2090.9	2148.8
12.5°	1935.6	1976.7	2036.1	2104.6
15°	1865.5	1911.2	1984.3	2066.5
17.5°	1787.8	1839.6	1924.9	2014.7
20°	1705.6	1774.1	1864.0	1961.4
22.5°	1614.2	1696.5	1789.4	1897.5
25°	1525.9	1615.8	1708.6	1833.5
27.5°	1439.1	1527.4	1631.0	1757.4
30°	1352.3	1433.0	1544.2	1679.7
32.5°	1259.4	1343.2	1460.4	1599.0
35°	1174.1	1257.9	1367.5	1504.6
37.5°	1082.8	1172.6	1277.7	1419.3
40°	976.2	1081.2	1183.3	1318.8
42.5°	887.8	999.0	1098.0	1225.9
45°	817.8	922.9	1005.1	1130.0
47.5°	752.3	837.6	921.3	1037.1
50°	689.9	755.3	842.1	945.7
52.5°	625.9	682.2	756.9	854.3
55°	568.0	621.3	688.3	763.0
57.5°	514.7	552.8	619.8	686.8
60°	455.3	494.9	546.7	603.1
62.5°	405.1	435.5	484.3	531.5
65°	351.8	380.7	417.3	461.4
67.5°	303.0	328.9	357.9	392.9
70°	258.9	278.7	300.0	330.5
72.5°	211.7	233.0	252.8	277.2
75°	173.6	182.7	199.5	216.2
77.5°	134.0	146.2	155.3	169.0
80°	95.9	106.6	109.6	120.3
82.5°	64.0	70.1	76.1	79.2
85°	36.5	39.6	45.7	47.2
87.5°	13.7	15.2	18.3	21.3
90°	0.0	0.0	0.0	0.0

TEST NUMBER: P997684

CATALOG NUMBER: SA2XXRDP-B1005DB27-4F0-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	23.36	24.81	23.72	25.12	25.44	17.77	19.22	18.14	19.54	19.85
	3H	24.69	25.99	25.06	26.31	26.68	18.90	20.20	19.28	20.53	20.89
	4H	25.11	26.33	25.51	26.68	27.06	19.36	20.58	19.76	20.93	21.31
	6H	25.39	26.51	25.80	26.88	27.27	19.74	20.86	20.15	21.23	21.62
	8H	25.46	26.53	25.89	26.92	27.32	19.86	20.93	20.29	21.32	21.72
	12H	25.50	26.52	25.93	26.90	27.33	19.94	20.96	20.38	21.35	21.78
4H	2H	23.33	24.55	23.73	24.90	25.28	18.45	19.67	18.86	20.02	20.40
	3H	24.78	25.78	25.19	26.19	26.59	19.75	20.75	20.16	21.15	21.56
	4H	25.28	26.19	25.72	26.60	27.04	20.30	21.21	20.74	21.62	22.06
	6H	25.66	26.44	26.12	26.89	27.35	20.79	21.57	21.24	22.01	22.48
	8H	25.77	26.50	26.24	26.95	27.42	20.95	21.68	21.41	22.13	22.60
	12H	25.85	26.50	26.33	26.98	27.45	21.07	21.72	21.55	22.20	22.67
8H	4H	25.27	26.00	25.74	26.45	26.92	20.62	21.36	21.09	21.80	22.27
	6H	25.69	26.29	26.19	26.79	27.26	21.21	21.81	21.71	22.30	22.78
	8H	25.83	26.37	26.35	26.89	27.38	21.44	21.98	21.95	22.49	22.98
	12H	25.95	26.43	26.46	26.92	27.49	21.63	22.10	22.14	22.60	23.16
12H	4H	25.25	25.90	25.73	26.38	26.85	20.66	21.31	21.14	21.79	22.26
	6H	25.66	26.21	26.18	26.72	27.21	21.27	21.81	21.78	22.32	22.81
	8H	25.84	26.32	26.35	26.81	27.38	21.55	22.03	22.06	22.52	23.09