

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: P997561

Luminaire Tested: SA2XXDP-B1005DB50-4F0-XX-W2A-A

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997561
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-B1005DB50-4F0-XX-W2A-A
Description: Define 2 Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

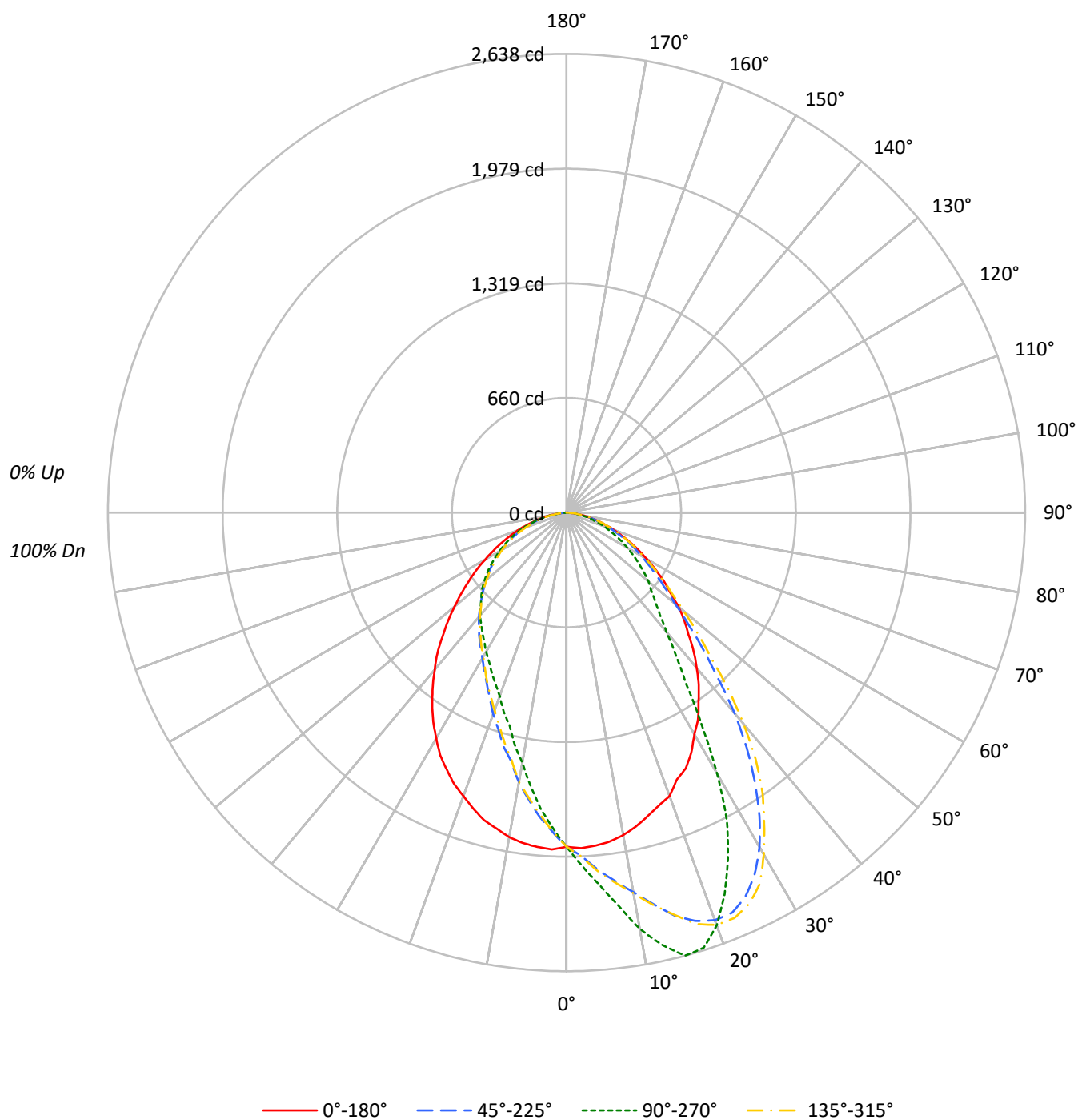
Lumens per Lamp: N/A
Luminaire Lumens: 4239.0 lumens
Efficiency: N/A
Efficacy: 69.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.09 / 1.23
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86		
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74		
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64		
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	58	55		
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49		
6	74	61	53	47	72	60	52	46	58	51	46	57	51	46	55	50	45	43		
7	69	56	48	42	67	55	47	42	54	46	41	52	46	41	51	45	41	39		
8	64	51	43	38	63	51	43	38	49	42	37	48	42	37	47	41	37	35		
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32		
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	30413	30413	30413	30413
5°	30553	34096	30670	27127
10°	30265	39071	30454	23477
15°	29598	43224	30009	20740
20°	29206	42564	29206	18907
25°	28347	38381	28476	17745
30°	26885	31716	27397	16898
35°	25598	23115	26026	16296
40°	24108	18463	24383	15961
45°	22249	16134	22612	15505
50°	20656	15165	20693	15202
55°	18830	13978	18951	14795
60°	16877	12809	17111	14167
65°	15154	11671	15432	13551
70°	13463	10594	13806	12644
75°	11559	9394	12012	11198
80°	9426	8077	10100	9015
85°	6974	7247	7519	5358

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 155°

Vertical Angle: 45°

Luminance: 39704 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.0	4.3
10°-20°	532.6	12.6
20°-30°	773.0	18.2
30°-40°	814.9	19.2
40°-50°	721.1	17.0
50°-60°	575.8	13.6
60°-70°	391.1	9.2
70°-80°	200.1	4.7
80°-90°	47.3	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°	1488.7	35.1
0°-40°	2303.6	54.3
0°-60°	3600.5	84.9
0°-90°	4239.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4239.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1921	1921	1921	1921	1921	
5°	1923	2146	1930	1707	1923	182
15°	1806	2638	1831	1266	1806	510
25°	1623	2198	1630	1016	1623	742
35°	1325	1196	1347	843	1325	829
45°	994	721	1010	693	994	771
55°	682	506	687	536	682	609
65°	405	312	412	362	405	402
75°	189	154	196	183	189	203
85°	38	40	41	30	38	47
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°	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3
2.5°	1931.6	1936.1	1943.5	1944.9	1959.7	1971.5	1984.8	1984.8	1989.2	1987.8	1976.0
5°	1922.8	1936.1	1955.3	1971.5	1998.1	2009.9	2027.6	2040.9	2052.7	2061.6	2060.1
7.5°	1908.0	1931.6	1959.7	1990.7	2026.2	2046.8	2071.9	2095.6	2111.8	2126.6	2136.9
10°	1882.9	1922.8	1961.2	2002.5	2048.3	2076.4	2105.9	2136.9	2162.0	2190.1	2216.7
12.5°	1848.9	1906.5	1953.8	2008.4	2064.6	2095.6	2142.8	2166.5	2215.2	2286.1	2305.3
15°	1806.1	1884.4	1928.7	1998.1	2071.9	2097.1	2162.0	2200.4	2300.8	2345.2	2398.3
17.5°	1766.2	1853.4	1912.5	1992.2	2064.6	2113.3	2176.8	2255.1	2339.2	2402.7	2461.8
20°	1733.8	1817.9	1888.8	1977.4	2069.0	2131.0	2197.5	2292.0	2383.5	2448.5	2494.3
22.5°	1659.9	1767.7	1850.4	1949.4	2060.1	2145.8	2209.3	2312.7	2411.6	2451.5	2491.4
25°	1623.0	1716.0	1812.0	1924.3	2054.2	2156.1	2210.8	2326.0	2413.1	2427.9	2436.7
27.5°	1555.1	1659.9	1772.2	1900.6	2052.7	2138.4	2207.8	2312.7	2382.1	2371.7	2345.2
30°	1470.9	1599.4	1723.4	1862.2	2032.1	2125.1	2190.1	2286.1	2321.5	2268.4	2221.1
32.5°	1408.9	1530.0	1667.3	1828.3	2008.4	2097.1	2160.6	2235.9	2243.3	2147.3	2067.5
35°	1324.7	1459.1	1614.1	1784.0	1968.6	2048.3	2107.4	2153.2	2117.7	1983.3	1888.8
37.5°	1249.4	1382.3	1547.7	1720.5	1913.9	1992.2	2039.5	2046.8	1959.7	1841.6	1702.7
40°	1166.7	1304.0	1476.8	1658.4	1853.4	1921.3	1950.8	1928.7	1803.2	1665.8	1504.9
42.5°	1084.0	1219.8	1405.9	1592.0	1776.6	1834.2	1846.0	1785.4	1631.9	1470.9	1284.8
45°	993.9	1135.7	1321.7	1509.3	1688.0	1720.5	1721.9	1634.8	1453.2	1284.8	1112.0
47.5°	920.0	1051.5	1236.1	1423.6	1574.3	1596.4	1587.6	1487.1	1289.2	1100.2	949.6
50°	838.8	964.3	1147.5	1332.1	1460.6	1466.5	1444.3	1301.1	1107.6	934.8	815.2
52.5°	751.7	878.7	1047.0	1224.3	1339.5	1330.6	1287.8	1134.2	952.5	809.3	717.7
55°	682.3	794.5	952.5	1125.3	1206.5	1181.4	1134.2	977.6	834.4	713.3	633.5
57.5°	605.5	704.4	859.5	1010.1	1057.4	1033.8	986.5	840.3	707.4	615.8	562.7
60°	533.1	623.2	759.1	884.6	921.5	896.4	841.8	710.3	614.3	537.6	497.7
62.5°	466.7	544.9	658.7	773.8	788.6	763.5	716.2	609.9	527.2	466.7	437.1
65°	404.6	478.5	570.0	657.2	670.5	643.9	595.1	518.4	448.9	410.5	382.5
67.5°	344.1	403.2	484.4	547.9	555.3	530.2	490.3	428.3	385.4	344.1	323.4
70°	290.9	335.2	398.7	450.4	453.4	429.7	409.1	353.0	320.5	290.9	274.7
72.5°	239.2	270.3	319.0	357.4	358.9	344.1	324.9	289.5	261.4	240.7	224.5
75°	189.0	215.6	245.1	279.1	277.6	265.8	251.1	228.9	205.3	192.0	184.6
77.5°	144.7	161.0	184.6	206.8	206.8	200.8	192.0	175.7	161.0	147.7	140.3
80°	103.4	113.7	132.9	140.3	143.2	141.8	134.4	122.6	116.7	106.3	103.4
82.5°	66.5	73.8	82.7	90.1	94.5	91.6	90.1	84.2	75.3	72.4	69.4
85°	38.4	41.4	45.8	50.2	51.7	50.2	53.2	48.7	44.3	44.3	42.8
87.5°	16.2	17.7	20.7	20.7	22.2	22.2	20.7	22.2	22.2	20.7	19.2
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°	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3
2.5°	1996.6	1998.1	2001.1	2015.8	2023.2	2024.7	2018.8	2032.1	2036.5	2032.1	2029.1
5°	2091.1	2100.0	2117.7	2136.9	2135.4	2136.9	2145.8	2154.6	2157.6	2145.8	2150.2
7.5°	2173.8	2191.6	2210.8	2240.3	2240.3	2255.1	2261.0	2268.4	2286.1	2277.2	2274.3
10°	2268.4	2292.0	2327.4	2374.7	2376.2	2390.9	2405.7	2429.3	2436.7	2430.8	2433.8
12.5°	2386.5	2432.3	2435.2	2486.9	2510.6	2513.5	2537.1	2532.7	2547.5	2547.5	2572.6
15°	2438.2	2509.1	2549.0	2599.2	2613.9	2596.2	2615.4	2636.1	2637.6	2637.6	2636.1
17.5°	2531.2	2559.3	2599.2	2625.7	2631.7	2631.7	2633.1	2642.0	2636.1	2624.3	2633.1
20°	2550.4	2562.2	2577.0	2574.1	2577.0	2562.2	2547.5	2532.7	2534.2	2526.8	2549.0
22.5°	2515.0	2512.0	2478.1	2455.9	2455.9	2426.4	2398.3	2385.0	2371.7	2376.2	2383.5
25°	2426.4	2380.6	2339.2	2306.8	2299.4	2252.1	2213.7	2201.9	2179.8	2197.5	2200.4
27.5°	2284.6	2232.9	2166.5	2138.4	2100.0	2080.8	2054.2	2018.8	1973.0	1999.6	1995.2
30°	2132.5	2055.7	2001.1	1933.1	1872.6	1868.1	1817.9	1758.9	1735.2	1735.2	1748.5
32.5°	1962.7	1860.8	1781.0	1685.0	1626.0	1600.8	1540.3	1481.2	1494.5	1450.2	1466.5
35°	1764.8	1630.4	1530.0	1436.9	1392.6	1363.1	1284.8	1252.3	1216.9	1196.2	1234.6
37.5°	1575.7	1420.7	1292.2	1190.3	1174.1	1120.9	1067.7	1047.0	1026.4	1035.2	1033.8
40°	1345.4	1208.0	1092.8	1013.1	985.0	959.9	924.5	899.4	886.1	893.5	894.9
42.5°	1137.1	1021.9	936.3	880.2	856.5	838.8	821.1	800.4	796.0	796.0	801.9
45°	976.2	881.6	824.1	778.3	765.0	751.7	738.4	729.5	726.6	720.7	725.1
47.5°	847.7	772.4	736.9	703.0	688.2	685.2	673.4	669.0	663.1	661.6	663.1
50°	739.9	692.6	660.1	640.9	630.6	626.2	620.3	611.4	608.4	615.8	612.9
52.5°	664.6	620.3	602.5	583.3	577.4	571.5	562.7	564.1	562.7	559.7	559.7
55°	589.2	561.2	543.5	528.7	527.2	521.3	513.9	511.0	509.5	506.5	511.0
57.5°	528.7	506.5	490.3	477.0	471.1	471.1	463.7	457.8	457.8	456.3	457.8
60°	468.1	446.0	435.7	422.4	417.9	416.5	412.0	409.1	404.6	404.6	404.6
62.5°	412.0	394.3	382.5	370.7	372.2	364.8	358.9	355.9	355.9	357.4	357.4
65°	358.9	347.0	332.3	321.9	319.0	317.5	314.6	313.1	308.7	311.6	311.6
67.5°	310.1	293.9	285.0	280.6	276.2	274.7	271.7	268.8	267.3	265.8	268.8
70°	261.4	248.1	240.7	237.8	233.3	231.9	230.4	225.9	227.4	228.9	230.4
72.5°	217.1	205.3	203.8	194.9	194.9	194.9	189.0	192.0	190.5	187.6	190.5
75°	171.3	165.4	162.4	158.0	159.5	158.0	156.5	152.1	152.1	153.6	155.1
77.5°	135.9	130.0	128.5	124.1	121.1	124.1	121.1	119.6	119.6	121.1	121.1
80°	100.4	97.5	93.0	93.0	93.0	91.6	91.6	91.6	90.1	88.6	90.1
82.5°	66.5	66.5	65.0	63.5	65.0	62.0	63.5	63.5	63.5	63.5	63.5
85°	42.8	41.4	41.4	39.9	39.9	39.9	41.4	38.4	38.4	39.9	39.9
87.5°	19.2	19.2	19.2	20.7	19.2	19.2	19.2	20.7	19.2	19.2	19.2
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3
2.5°	2036.5	2026.2	2017.3	2018.8	2026.2	2020.3	2005.5	1986.3	1978.9	1970.0	1978.9
5°	2159.1	2150.2	2132.5	2134.0	2129.5	2123.6	2100.0	2070.5	2070.5	2046.8	2043.9
7.5°	2280.2	2266.9	2255.1	2252.1	2235.9	2224.1	2203.4	2162.0	2145.8	2117.7	2101.5
10°	2416.0	2405.7	2392.4	2376.2	2367.3	2346.6	2312.7	2252.1	2222.6	2184.2	2156.1
12.5°	2553.4	2551.9	2522.4	2489.9	2488.4	2455.9	2432.3	2351.1	2311.2	2259.5	2193.0
15°	2640.5	2633.1	2616.9	2600.6	2605.1	2569.6	2516.5	2420.5	2393.9	2331.9	2261.0
17.5°	2639.0	2639.0	2634.6	2631.7	2627.2	2616.9	2587.3	2523.8	2481.0	2402.7	2336.3
20°	2554.9	2574.1	2578.5	2577.0	2591.8	2599.2	2597.7	2557.8	2523.8	2454.4	2386.5
22.5°	2386.5	2430.8	2450.0	2461.8	2492.8	2509.1	2547.5	2532.7	2523.8	2472.2	2414.6
25°	2230.0	2244.7	2302.3	2305.3	2348.1	2388.0	2426.4	2451.5	2484.0	2464.8	2416.0
27.5°	2027.6	2061.6	2103.0	2134.0	2142.8	2224.1	2287.6	2334.8	2408.7	2414.6	2398.3
30°	1798.7	1815.0	1882.9	1924.3	1971.5	2030.6	2122.2	2203.4	2269.8	2330.4	2351.1
32.5°	1519.6	1586.1	1626.0	1676.2	1717.5	1822.4	1934.6	2039.5	2116.2	2218.1	2262.5
35°	1264.1	1315.8	1383.8	1404.4	1479.8	1568.4	1714.6	1848.9	1965.6	2069.0	2159.1
37.5°	1053.0	1094.3	1166.7	1199.2	1243.5	1357.2	1479.8	1646.6	1786.9	1913.9	2026.2
40°	908.2	939.2	993.9	1004.2	1041.1	1144.5	1243.5	1400.0	1586.1	1757.4	1880.0
42.5°	809.3	824.1	861.0	874.3	897.9	967.3	1055.9	1203.6	1376.4	1553.6	1726.4
45°	738.4	748.7	770.9	782.7	812.2	843.3	915.6	1033.8	1169.6	1348.3	1534.4
47.5°	674.9	688.2	697.0	704.4	720.7	754.6	801.9	889.0	1019.0	1182.9	1363.1
50°	621.7	626.2	642.4	643.9	654.2	676.4	720.7	773.8	877.2	1010.1	1184.4
52.5°	568.6	573.0	583.3	593.7	598.1	615.8	645.4	689.7	766.5	871.3	1026.4
55°	515.4	521.3	531.6	539.0	543.5	558.2	576.0	618.8	679.3	753.2	880.2
57.5°	462.2	475.5	478.5	482.9	490.3	506.5	522.8	547.9	595.1	663.1	756.1
60°	412.0	416.5	426.8	431.2	438.6	447.5	468.1	487.3	521.3	574.5	658.7
62.5°	360.3	370.7	375.1	379.5	385.4	395.8	409.1	429.7	459.3	502.1	568.6
65°	316.0	317.5	326.4	332.3	338.2	345.6	358.9	378.1	395.8	435.7	484.4
67.5°	273.2	276.2	279.1	285.0	292.4	299.8	311.6	321.9	344.1	370.7	409.1
70°	231.9	231.9	239.2	243.7	242.2	251.1	259.9	271.7	288.0	313.1	344.1
72.5°	194.9	193.5	199.4	200.8	203.8	209.7	215.6	227.4	236.3	255.5	279.1
75°	155.1	158.0	161.0	161.0	165.4	169.8	175.7	181.6	192.0	203.8	221.5
77.5°	122.6	122.6	125.5	127.0	131.4	130.0	135.9	141.8	149.2	159.5	172.8
80°	90.1	93.0	93.0	93.0	94.5	96.0	101.9	106.3	110.8	118.1	124.1
82.5°	63.5	63.5	66.5	66.5	66.5	69.4	69.4	70.9	73.8	78.3	82.7
85°	39.9	39.9	39.9	41.4	39.9	41.4	44.3	42.8	44.3	47.3	47.3
87.5°	19.2	19.2	19.2	19.2	19.2	20.7	19.2	20.7	22.2	22.2	22.2
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: P997561

CATALOG NUMBER: SA2XXDP-B1005DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3
2.5°	1971.5	1964.1	1959.7	1962.7	1953.8	1931.6	1931.6	1939.0	1930.2	1921.3	1908.0
5°	2026.2	2011.4	2002.5	2001.1	1980.4	1944.9	1937.6	1930.2	1911.0	1890.3	1868.1
7.5°	2079.3	2052.7	2038.0	2027.6	1998.1	1952.3	1933.1	1916.9	1885.9	1854.9	1826.8
10°	2123.6	2085.2	2067.5	2051.3	2012.9	1955.3	1924.3	1894.7	1854.9	1815.0	1779.5
12.5°	2159.1	2114.8	2092.6	2069.0	2021.7	1946.4	1908.0	1860.8	1820.9	1767.7	1732.3
15°	2218.1	2126.6	2105.9	2083.8	2035.0	1931.6	1884.4	1831.2	1776.6	1705.7	1667.3
17.5°	2265.4	2142.8	2141.4	2094.1	2030.6	1925.7	1853.4	1784.0	1724.9	1654.0	1593.5
20°	2293.5	2167.9	2144.3	2095.6	2015.8	1885.9	1810.6	1733.8	1670.3	1584.6	1524.1
22.5°	2317.1	2203.4	2141.4	2082.3	1984.8	1872.6	1761.8	1689.5	1602.3	1509.3	1451.7
25°	2326.0	2210.8	2145.8	2077.9	1962.7	1834.2	1708.7	1630.4	1532.9	1448.7	1370.5
27.5°	2327.4	2209.3	2129.5	2058.7	1931.6	1784.0	1655.5	1572.8	1465.0	1367.5	1289.2
30°	2312.7	2193.0	2120.7	2043.9	1902.1	1738.2	1590.5	1498.9	1383.8	1286.3	1205.1
32.5°	2268.4	2160.6	2101.5	2017.3	1863.7	1674.7	1528.5	1426.6	1305.5	1209.5	1131.2
35°	2194.5	2120.7	2055.7	1977.4	1813.5	1615.6	1466.5	1346.8	1224.3	1132.7	1058.9
37.5°	2103.0	2063.1	2002.5	1925.7	1755.9	1562.5	1397.0	1264.1	1141.6	1053.0	980.6
40°	1978.9	1989.2	1930.2	1860.8	1688.0	1490.1	1307.0	1180.0	1064.8	982.1	911.2
42.5°	1844.5	1887.3	1853.4	1786.9	1612.7	1410.3	1240.5	1100.2	988.0	902.3	843.3
45°	1699.8	1773.6	1753.0	1704.2	1534.4	1326.2	1146.0	1010.1	911.2	828.5	776.8
47.5°	1541.8	1646.6	1646.6	1611.2	1447.3	1242.0	1064.8	926.0	828.5	769.4	719.2
50°	1380.8	1498.9	1518.1	1494.5	1349.8	1146.0	965.8	840.3	756.1	698.5	661.6
52.5°	1212.4	1349.8	1385.2	1373.4	1246.4	1054.4	884.6	762.0	685.2	635.0	602.5
55°	1051.5	1211.0	1249.4	1253.8	1135.7	954.0	794.5	686.7	612.9	578.9	550.8
57.5°	899.4	1053.0	1095.8	1103.2	1023.4	862.4	710.3	615.8	549.4	521.3	499.2
60°	769.4	897.9	954.0	970.3	900.8	756.1	632.1	540.5	490.3	463.7	443.0
62.5°	663.1	766.5	825.5	830.0	798.9	663.1	550.8	474.1	431.2	407.6	397.3
65°	559.7	652.7	688.2	705.9	680.8	574.5	475.5	412.0	378.1	357.4	347.0
67.5°	477.0	536.1	565.6	589.2	564.1	484.4	404.6	353.0	327.8	307.2	301.3
70°	391.4	440.1	462.2	485.9	463.7	403.2	345.6	298.3	276.2	259.9	252.5
72.5°	313.1	351.5	372.2	386.9	373.6	323.4	276.2	243.7	227.4	215.6	211.2
75°	248.1	274.7	286.5	296.8	290.9	252.5	223.0	196.4	181.6	171.3	168.4
77.5°	189.0	208.2	221.5	224.5	217.1	192.0	166.9	150.6	138.8	132.9	130.0
80°	134.4	146.2	153.6	158.0	150.6	140.3	122.6	110.8	100.4	93.0	91.6
82.5°	90.1	96.0	101.9	100.4	97.5	88.6	78.3	72.4	67.9	62.0	62.0
85°	51.7	53.2	56.1	57.6	56.1	50.2	44.3	41.4	38.4	34.0	34.0
87.5°	22.2	23.6	23.6	25.1	22.2	22.2	19.2	16.2	16.2	14.8	13.3
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: P997561

CATALOG NUMBER: SA2XXDP-B1005DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3
2.5°	1900.6	1908.0	1906.5	1891.8	1875.5	1862.2	1837.1	1840.1	1831.2	1832.7	1841.6
5°	1853.4	1853.4	1847.5	1826.8	1800.2	1785.4	1757.4	1750.0	1732.3	1730.8	1729.3
7.5°	1803.2	1795.8	1788.4	1758.9	1726.4	1702.7	1664.3	1655.5	1637.8	1626.0	1620.0
10°	1744.1	1733.8	1719.0	1685.0	1645.2	1615.6	1575.7	1563.9	1530.0	1515.2	1506.3
12.5°	1679.1	1673.2	1649.6	1621.5	1556.5	1524.1	1466.5	1478.3	1444.3	1414.8	1410.3
15°	1614.1	1592.0	1578.7	1532.9	1454.6	1439.9	1394.1	1370.5	1339.5	1315.8	1315.8
17.5°	1550.6	1516.7	1487.1	1438.4	1380.8	1339.5	1305.5	1293.7	1255.3	1231.6	1227.2
20°	1466.5	1428.1	1420.7	1351.3	1311.4	1265.6	1233.1	1203.6	1175.5	1165.2	1157.8
22.5°	1386.7	1342.4	1330.6	1271.5	1231.6	1185.9	1153.4	1132.7	1112.0	1104.6	1091.4
25°	1301.1	1274.5	1256.8	1193.3	1148.9	1106.1	1084.0	1069.2	1050.0	1048.5	1039.7
27.5°	1218.4	1193.3	1175.5	1115.0	1082.5	1042.6	1024.9	1008.7	998.3	993.9	989.5
30°	1147.5	1119.4	1098.7	1054.4	1014.6	982.1	967.3	957.0	951.1	943.7	942.2
32.5°	1069.2	1053.0	1024.9	990.9	959.9	928.9	920.0	912.7	903.8	900.8	899.4
35°	1002.7	980.6	962.9	924.5	911.2	884.6	874.3	868.4	856.5	853.6	850.6
37.5°	937.8	917.1	897.9	874.3	849.2	834.4	828.5	819.6	813.7	815.2	812.2
40°	872.8	856.5	841.8	816.7	801.9	794.5	782.7	773.8	770.9	772.4	770.9
42.5°	809.3	794.5	785.7	766.5	751.7	744.3	736.9	728.1	732.5	732.5	736.9
45°	751.7	738.4	732.5	717.7	708.9	697.0	689.7	688.2	694.1	692.6	692.6
47.5°	692.6	688.2	680.8	667.5	655.7	648.3	646.8	646.8	652.7	655.7	654.2
50°	646.8	638.0	629.1	618.8	609.9	607.0	602.5	605.5	611.4	611.4	614.3
52.5°	589.2	583.3	580.4	571.5	565.6	565.6	565.6	567.1	571.5	576.0	574.5
55°	539.0	534.6	531.6	527.2	519.8	521.3	519.8	522.8	527.2	531.6	534.6
57.5°	485.9	484.4	481.4	474.1	474.1	472.6	477.0	478.5	485.9	488.8	493.3
60°	438.6	434.2	434.2	428.3	428.3	428.3	432.7	437.1	443.0	444.5	447.5
62.5°	388.4	388.4	386.9	382.5	382.5	386.9	388.4	394.3	397.3	397.3	401.7
65°	341.1	339.7	338.2	339.7	341.1	341.1	345.6	348.5	351.5	353.0	354.4
67.5°	293.9	292.4	295.4	293.9	296.8	302.7	301.3	305.7	310.1	310.1	311.6
70°	249.6	252.5	251.1	254.0	252.5	255.5	259.9	261.4	261.4	262.9	267.3
72.5°	208.2	208.2	208.2	206.8	208.2	211.2	214.1	215.6	218.6	220.0	224.5
75°	168.4	168.4	165.4	168.4	168.4	171.3	174.3	174.3	174.3	177.2	181.6
77.5°	127.0	128.5	127.0	130.0	130.0	131.4	134.4	132.9	135.9	137.3	138.8
80°	93.0	91.6	91.6	91.6	93.0	93.0	96.0	97.5	97.5	101.9	98.9
82.5°	59.1	60.5	59.1	60.5	60.5	62.0	60.5	62.0	63.5	66.5	65.0
85°	34.0	32.5	32.5	34.0	32.5	32.5	34.0	32.5	34.0	32.5	34.0
87.5°	13.3	11.8	11.8	11.8	11.8	10.3	10.3	8.9	8.9	8.9	7.4
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: P997561

CATALOG NUMBER: SA2XXDP-B1005DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3
2.5°	1831.2	1835.7	1825.3	1822.4	1825.3	1815.0	1817.9	1820.9	1820.9	1825.3	1828.3
5°	1724.9	1719.0	1708.7	1705.7	1702.7	1707.2	1704.2	1708.7	1710.1	1720.5	1721.9
7.5°	1620.0	1611.2	1602.3	1593.5	1590.5	1583.1	1590.5	1590.5	1600.8	1597.9	1605.3
10°	1496.0	1494.5	1482.7	1478.3	1472.4	1460.6	1476.8	1472.4	1479.8	1493.0	1496.0
12.5°	1404.4	1388.2	1395.6	1374.9	1382.3	1370.5	1371.9	1371.9	1383.8	1385.2	1382.3
15°	1317.3	1304.0	1284.8	1276.0	1271.5	1265.6	1284.8	1286.3	1277.4	1298.1	1290.7
17.5°	1228.7	1228.7	1211.0	1206.5	1194.7	1200.6	1197.7	1199.2	1196.2	1211.0	1218.4
20°	1151.9	1144.5	1138.6	1140.1	1125.3	1122.4	1119.4	1122.4	1132.7	1143.0	1146.0
22.5°	1089.9	1085.4	1070.7	1073.6	1061.8	1066.2	1063.3	1070.7	1072.2	1072.2	1082.5
25°	1030.8	1024.9	1026.4	1020.5	1016.0	1016.0	1011.6	1016.0	1021.9	1024.9	1026.4
27.5°	986.5	982.1	974.7	970.3	973.2	965.8	971.7	976.2	976.2	973.2	976.2
30°	933.3	936.3	936.3	921.5	927.4	924.5	928.9	931.9	931.9	933.3	930.4
32.5°	897.9	889.0	887.6	886.1	886.1	880.2	880.2	884.6	886.1	887.6	892.0
35°	850.6	850.6	843.3	847.7	841.8	843.3	841.8	843.3	846.2	841.8	846.2
37.5°	807.8	809.3	806.3	809.3	810.8	807.8	804.9	810.8	807.8	807.8	804.9
40°	770.9	769.4	770.9	770.9	770.9	772.4	769.4	769.4	769.4	766.5	763.5
42.5°	739.9	731.0	734.0	735.4	731.0	731.0	732.5	731.0	735.4	726.6	726.6
45°	695.6	692.6	694.1	694.1	697.0	692.6	695.6	697.0	692.6	691.1	688.2
47.5°	655.7	658.7	655.7	658.7	658.7	661.6	655.7	657.2	658.7	652.7	648.3
50°	615.8	615.8	620.3	618.8	620.3	617.3	617.3	615.8	617.3	614.3	609.9
52.5°	578.9	574.5	581.9	580.4	578.9	577.4	576.0	577.4	574.5	571.5	571.5
55°	533.1	533.1	537.6	539.0	539.0	536.1	533.1	534.6	533.1	531.6	530.2
57.5°	496.2	490.3	493.3	494.7	494.7	490.3	493.3	490.3	490.3	491.8	487.3
60°	448.9	448.9	446.0	450.4	450.4	447.5	447.5	448.9	446.0	444.5	443.0
62.5°	398.7	400.2	404.6	406.1	407.6	404.6	401.7	403.2	403.2	398.7	400.2
65°	355.9	358.9	364.8	363.3	360.3	361.8	358.9	360.3	355.9	357.4	353.0
67.5°	314.6	313.1	314.6	314.6	317.5	316.0	313.1	313.1	311.6	316.0	311.6
70°	270.3	270.3	270.3	270.3	271.7	273.2	270.3	267.3	268.8	265.8	264.3
72.5°	224.5	225.9	224.5	227.4	223.0	225.9	225.9	224.5	223.0	223.0	223.0
75°	181.6	184.6	180.2	181.6	180.2	183.1	181.6	181.6	178.7	177.2	178.7
77.5°	138.8	140.3	137.3	138.8	137.3	138.8	138.8	137.3	137.3	137.3	137.3
80°	98.9	100.4	98.9	97.5	96.0	98.9	96.0	97.5	98.9	97.5	100.4
82.5°	63.5	63.5	62.0	63.5	60.5	60.5	62.0	62.0	60.5	63.5	60.5
85°	31.0	31.0	34.0	31.0	29.5	29.5	29.5	31.0	29.5	32.5	31.0
87.5°	7.4	5.9	7.4	7.4	5.9	5.9	7.4	5.9	7.4	8.9	5.9
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: P997561

CATALOG NUMBER: SA2XXDP-B1005DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3	1921.3
2.5°	1823.8	1835.7	1831.2	1815.0	1834.2	1834.2	1847.5	1847.5	1863.7	1869.6	1878.5
5°	1720.5	1729.3	1736.7	1729.3	1742.6	1763.3	1775.1	1785.4	1807.6	1816.5	1829.8
7.5°	1609.7	1626.0	1633.3	1633.3	1655.5	1679.1	1702.7	1717.5	1748.5	1760.3	1773.6
10°	1501.9	1521.1	1535.9	1534.4	1571.3	1586.1	1615.6	1649.6	1680.6	1698.3	1717.5
12.5°	1388.2	1398.5	1419.2	1448.7	1457.6	1484.2	1518.1	1561.0	1617.1	1633.3	1661.4
15°	1293.7	1321.7	1338.0	1351.3	1371.9	1397.0	1434.0	1475.3	1531.4	1566.9	1596.4
17.5°	1213.9	1250.8	1261.2	1258.2	1284.8	1323.2	1366.0	1397.0	1447.3	1490.1	1518.1
20°	1148.9	1163.7	1181.4	1188.8	1209.5	1250.8	1292.2	1327.6	1369.0	1403.0	1435.4
22.5°	1084.0	1095.8	1110.6	1123.8	1140.1	1163.7	1203.6	1247.9	1287.8	1320.3	1357.2
25°	1030.8	1038.2	1051.5	1061.8	1079.5	1095.8	1123.8	1172.6	1219.8	1239.0	1271.5
27.5°	979.1	985.0	993.9	1005.7	1014.6	1030.8	1055.9	1095.8	1144.5	1163.7	1208.0
30°	933.3	937.8	946.6	952.5	957.0	976.2	995.4	1026.4	1063.3	1089.9	1122.4
32.5°	890.5	894.9	903.8	905.3	911.2	921.5	939.2	967.3	999.8	1021.9	1050.0
35°	843.3	846.2	855.1	858.0	862.4	871.3	884.6	905.3	934.8	951.1	976.2
37.5°	806.3	804.9	810.8	815.2	821.1	825.5	830.0	850.6	872.8	887.6	906.8
40°	766.5	763.5	765.0	770.9	773.8	779.7	779.7	800.4	815.2	827.0	841.8
42.5°	726.6	725.1	722.2	725.1	728.1	729.5	731.0	745.8	760.6	770.9	787.1
45°	686.7	685.2	682.3	683.8	683.8	686.7	691.1	697.0	707.4	716.2	725.1
47.5°	649.8	646.8	642.4	640.9	643.9	643.9	643.9	649.8	660.1	663.1	671.9
50°	611.4	607.0	601.1	598.1	598.1	596.6	599.6	601.1	609.9	612.9	620.3
52.5°	570.0	567.1	561.2	555.3	556.8	553.8	555.3	556.8	559.7	564.1	568.6
55°	528.7	522.8	518.4	516.9	512.4	512.4	508.0	513.9	512.4	513.9	519.8
57.5°	488.8	482.9	475.5	472.6	468.1	466.7	463.7	462.2	463.7	468.1	472.6
60°	441.6	438.6	434.2	429.7	426.8	422.4	419.4	419.4	417.9	417.9	419.4
62.5°	395.8	394.3	388.4	386.9	384.0	381.0	376.6	373.6	373.6	376.6	378.1
65°	351.5	350.0	345.6	344.1	336.7	333.8	332.3	330.8	327.8	327.8	327.8
67.5°	310.1	305.7	305.7	298.3	292.4	289.5	286.5	285.0	285.0	285.0	286.5
70°	264.3	264.3	259.9	255.5	249.6	251.1	246.6	242.2	242.2	239.2	240.7
72.5°	220.0	218.6	214.1	212.7	208.2	203.8	200.8	203.8	199.4	197.9	199.4
75°	177.2	175.7	172.8	169.8	171.3	166.9	162.4	161.0	161.0	158.0	158.0
77.5°	135.9	138.8	132.9	131.4	128.5	125.5	124.1	122.6	122.6	122.6	125.5
80°	94.5	96.0	96.0	93.0	94.5	90.1	90.1	90.1	85.7	87.1	88.6
82.5°	60.5	60.5	59.1	60.5	59.1	59.1	57.6	57.6	56.1	56.1	57.6
85°	34.0	32.5	31.0	34.0	32.5	32.5	31.0	31.0	31.0	31.0	31.0
87.5°	7.4	8.9	8.9	8.9	8.9	10.3	10.3	10.3	11.8	11.8	11.8
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: P997561

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CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	1921.3	1921.3	1921.3	1921.3
2.5°	1885.9	1885.9	1908.0	1931.6
5°	1844.5	1854.9	1890.3	1922.8
7.5°	1804.6	1822.4	1866.7	1908.0
10°	1755.9	1779.5	1834.2	1882.9
12.5°	1708.7	1730.8	1794.3	1848.9
15°	1642.2	1670.3	1738.2	1806.1
17.5°	1575.7	1603.8	1686.5	1766.2
20°	1497.5	1534.4	1627.4	1733.8
22.5°	1425.1	1470.9	1574.3	1659.9
25°	1345.4	1416.2	1512.2	1623.0
27.5°	1274.5	1345.4	1442.8	1555.1
30°	1194.7	1267.1	1367.5	1470.9
32.5°	1117.9	1184.4	1281.9	1408.9
35°	1038.2	1101.7	1196.2	1324.7
37.5°	965.8	1027.9	1131.2	1249.4
40°	894.9	959.9	1048.5	1166.7
42.5°	828.5	886.1	965.8	1084.0
45°	767.9	809.3	883.1	993.9
47.5°	704.4	741.4	809.3	920.0
50°	645.4	676.4	735.4	838.8
52.5°	587.8	614.3	669.0	751.7
55°	536.1	561.2	601.1	682.3
57.5°	482.9	502.1	540.5	605.5
60°	431.2	448.9	480.0	533.1
62.5°	379.5	394.3	423.8	466.7
65°	333.8	345.6	367.7	404.6
67.5°	289.5	296.8	314.6	344.1
70°	246.6	252.5	267.3	290.9
72.5°	200.8	206.8	223.0	239.2
75°	162.4	163.9	175.7	189.0
77.5°	127.0	125.5	134.4	144.7
80°	87.1	91.6	98.9	103.4
82.5°	59.1	60.5	63.5	66.5
85°	32.5	34.0	34.0	38.4
87.5°	13.3	14.8	14.8	16.2
90°	0.0	0.0	0.0	0.0

TEST NUMBER: P997561

CATALOG NUMBER: SA2XXDP-B1005DB50-4F0-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	23.84	25.35	24.20	25.67	25.98	20.10	21.62	20.47	21.93	22.25
	3H	24.95	26.31	25.33	26.64	27.00	21.52	22.88	21.89	23.21	23.57
	4H	25.27	26.55	25.67	26.90	27.28	22.02	23.30	22.42	23.65	24.03
	6H	25.46	26.64	25.88	27.01	27.40	22.38	23.56	22.79	23.93	24.32
	8H	25.50	26.63	25.93	27.02	27.42	22.49	23.62	22.92	24.01	24.41
	12H	25.52	26.59	25.95	26.98	27.40	22.57	23.64	23.00	24.02	24.45
4H	2H	23.95	25.23	24.35	25.58	25.96	20.90	22.18	21.30	22.53	22.90
	3H	25.29	26.35	25.70	26.75	27.15	22.48	23.54	22.89	23.94	24.34
	4H	25.76	26.71	26.19	27.13	27.57	23.08	24.03	23.51	24.45	24.88
	6H	26.09	26.92	26.55	27.36	27.82	23.53	24.36	23.99	24.80	25.26
	8H	26.17	26.94	26.63	27.39	27.85	23.67	24.45	24.14	24.89	25.36
	12H	26.21	26.90	26.69	27.38	27.85	23.78	24.47	24.26	24.95	25.42
8H	4H	25.84	26.62	26.31	27.06	27.53	23.48	24.26	23.95	24.70	25.17
	6H	26.25	26.89	26.75	27.38	27.86	24.03	24.67	24.52	25.16	25.64
	8H	26.38	26.95	26.89	27.46	27.95	24.23	24.80	24.74	25.31	25.80
	12H	26.47	26.98	26.98	27.47	28.03	24.39	24.90	24.90	25.39	25.95
12H	4H	25.84	26.53	26.32	27.01	27.48	23.54	24.23	24.02	24.71	25.18
	6H	26.24	26.82	26.76	27.33	27.82	24.10	24.68	24.62	25.19	25.67
	8H	26.41	26.92	26.92	27.41	27.98	24.35	24.86	24.86	25.35	25.91