

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: P997654

Luminaire Tested: SA2XXDP-B865DB27-4F0-XX-W2A-A

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997654
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-B865DB27-4F0-XX-W2A-A
Description: Define 2 Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

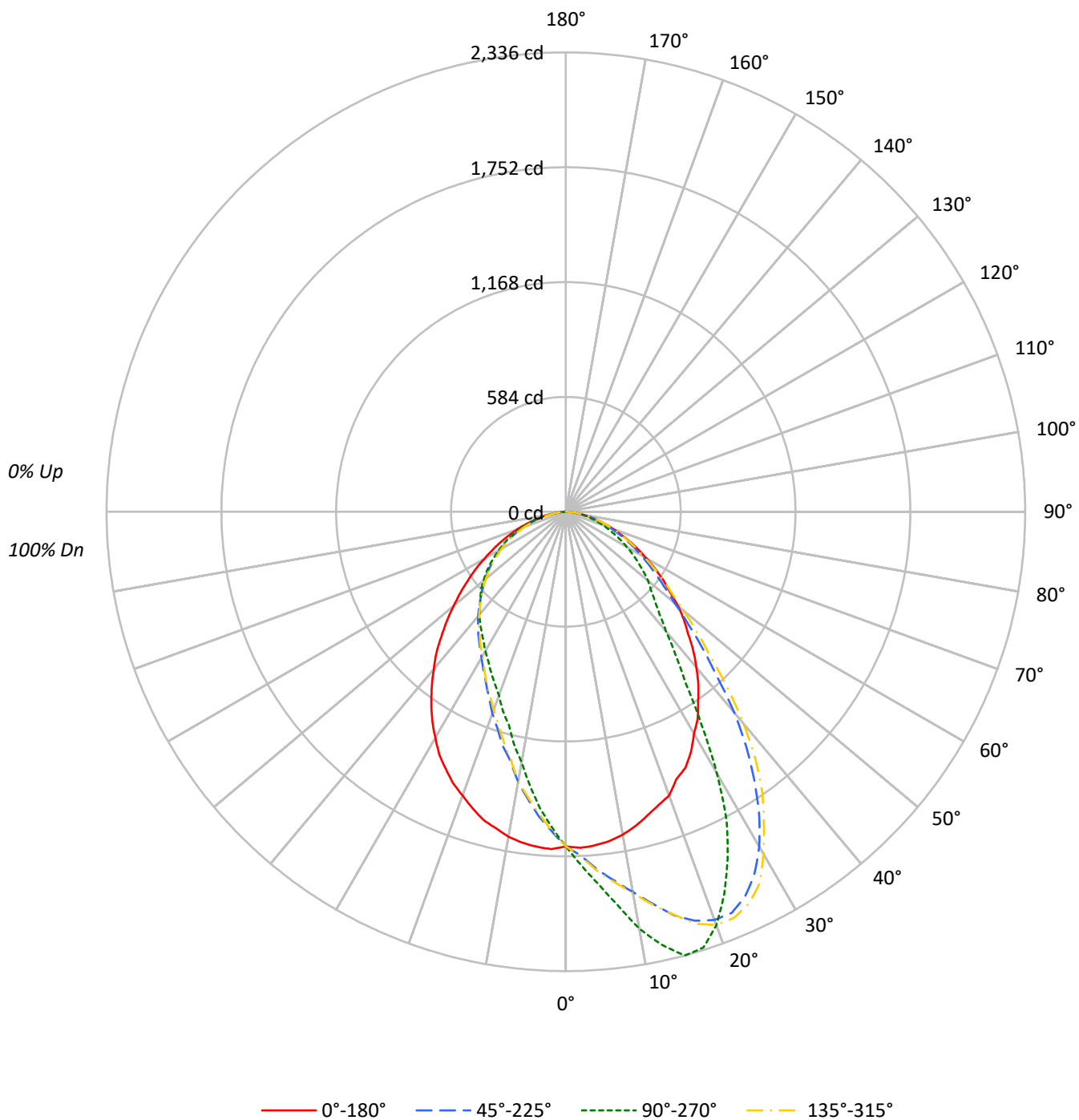
Lumens per Lamp: N/A
Luminaire Lumens: 3754.0 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.09 / 1.23
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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

TEST NUMBER: P997654

CATALOG NUMBER: SA2XXDP-B865DB27-4F0-XX-W2A-A

Luminous Intensity Polar Plot



TEST NUMBER: P997654

CATALOG NUMBER: SA2XXDP-B865DB27-4F0-XX-W2A-A

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°	26934	26934	26934	26934
5°	27057	30195	27160	24024
10°	26803	34601	26970	20789
15°	26212	38278	26576	18367
20°	25864	37694	25864	16744
25°	25103	33990	25217	15716
30°	23809	28088	24262	14964
35°	22669	20470	23048	14431
40°	21350	16349	21594	14134
45°	19704	14287	20027	13732
50°	18292	13431	18327	13463
55°	16674	12380	16782	13101
60°	14946	11343	15155	12546
65°	13420	10338	13667	12001
70°	11922	9381	12228	11196
75°	10238	8318	10636	9920
80°	8341	7156	8943	7985
85°	6175	6411	6647	4758

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 155°

Vertical Angle: 45°

Luminance: 35162 cd/sqm

TEST NUMBER: P997654

CATALOG NUMBER: SA2XXDP-B865DB27-4F0-XX-W2A-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.1	4.3
10°-20°	471.7	12.6
20°-30°	684.6	18.2
30°-40°	721.7	19.2
40°-50°	638.6	17.0
50°-60°	509.9	13.6
60°-70°	346.4	9.2
70°-80°	177.2	4.7
80°-90°	41.9	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°	1318.3	35.1
0°-40°	2040.0	54.3
0°-60°	3188.6	84.9
0°-90°	3754.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3754.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1702	1702	1702	1702	1702	
5°	1703	1900	1709	1512	1703	161
15°	1600	2336	1622	1121	1600	452
25°	1437	1946	1444	900	1437	657
35°	1173	1059	1193	747	1173	734
45°	880	638	895	613	880	683
55°	604	449	608	475	604	539
65°	358	276	365	320	358	356
75°	167	136	174	162	167	180
85°	34	35	37	26	34	42
90°	0	0	0	0	0	

TEST NUMBER: P997654

CATALOG NUMBER: SA2XXDP-B865DB27-4F0-XX-W2A-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5
2.5°	1710.6	1714.6	1721.1	1722.4	1735.5	1746.0	1757.7	1757.7	1761.6	1760.3	1749.9
5°	1702.8	1714.6	1731.6	1746.0	1769.5	1780.0	1795.7	1807.4	1817.9	1825.7	1824.4
7.5°	1689.7	1710.6	1735.5	1763.0	1794.3	1812.7	1834.9	1855.8	1870.2	1883.3	1892.4
10°	1667.5	1702.8	1736.8	1773.4	1814.0	1838.8	1865.0	1892.4	1914.7	1939.5	1963.1
12.5°	1637.4	1688.4	1730.3	1778.6	1828.3	1855.8	1897.7	1918.6	1961.7	2024.5	2041.5
15°	1599.5	1668.8	1708.0	1769.5	1834.9	1857.1	1914.7	1948.7	2037.6	2076.8	2123.9
17.5°	1564.2	1641.3	1693.6	1764.3	1828.3	1871.5	1927.7	1997.1	2071.6	2127.8	2180.2
20°	1535.4	1609.9	1672.7	1751.2	1832.3	1887.2	1946.1	2029.8	2110.8	2168.4	2208.9
22.5°	1470.0	1565.5	1638.7	1726.3	1824.4	1900.3	1956.5	2048.1	2135.7	2171.0	2206.3
25°	1437.3	1519.7	1604.7	1704.1	1819.2	1909.4	1957.8	2059.8	2137.0	2150.1	2157.9
27.5°	1377.1	1470.0	1569.4	1683.2	1817.9	1893.7	1955.2	2048.1	2109.5	2100.4	2076.8
30°	1302.6	1416.4	1526.2	1649.2	1799.6	1882.0	1939.5	2024.5	2055.9	2008.8	1967.0
32.5°	1247.7	1354.9	1476.5	1619.1	1778.6	1857.1	1913.4	1980.1	1986.6	1901.6	1831.0
35°	1173.1	1292.1	1429.5	1579.9	1743.3	1814.0	1866.3	1906.8	1875.4	1756.4	1672.7
37.5°	1106.4	1224.1	1370.6	1523.6	1694.9	1764.3	1806.1	1812.7	1735.5	1630.9	1507.9
40°	1033.2	1154.8	1307.8	1468.7	1641.3	1701.5	1727.6	1708.0	1596.9	1475.2	1332.7
42.5°	959.9	1080.3	1245.1	1409.8	1573.3	1624.3	1634.8	1581.2	1445.2	1302.6	1137.8
45°	880.2	1005.7	1170.5	1336.6	1494.9	1523.6	1524.9	1447.8	1286.9	1137.8	984.8
47.5°	814.8	931.2	1094.7	1260.7	1394.1	1413.8	1405.9	1317.0	1141.7	974.3	840.9
50°	742.8	854.0	1016.2	1179.7	1293.4	1298.7	1279.1	1152.2	980.9	827.9	721.9
52.5°	665.7	778.2	927.3	1084.2	1186.2	1178.4	1140.4	1004.4	843.6	716.7	635.6
55°	604.2	703.6	843.6	996.6	1068.5	1046.3	1004.4	865.8	738.9	631.7	561.1
57.5°	536.2	623.8	761.2	894.6	936.4	915.5	873.6	744.2	626.5	545.4	498.3
60°	472.1	551.9	672.2	783.4	816.1	793.9	745.5	629.1	544.1	476.1	440.7
62.5°	413.3	482.6	583.3	685.3	698.4	676.1	634.3	540.1	466.9	413.3	387.1
65°	358.3	423.7	504.8	582.0	593.8	570.2	527.1	459.0	397.6	363.6	338.7
67.5°	304.7	357.0	429.0	485.2	491.7	469.5	434.2	379.3	341.3	304.7	286.4
70°	257.6	296.9	353.1	398.9	401.5	380.6	362.3	312.6	283.8	257.6	243.3
72.5°	211.9	239.3	282.5	316.5	317.8	304.7	287.7	256.3	231.5	213.2	198.8
75°	167.4	190.9	217.1	247.2	245.9	235.4	222.3	202.7	181.8	170.0	163.5
77.5°	128.2	142.6	163.5	183.1	183.1	177.9	170.0	155.6	142.6	130.8	124.2
80°	91.5	100.7	117.7	124.2	126.9	125.6	119.0	108.5	103.3	94.2	91.5
82.5°	58.9	65.4	73.2	79.8	83.7	81.1	79.8	74.5	66.7	64.1	61.5
85°	34.0	36.6	40.5	44.5	45.8	44.5	47.1	43.2	39.2	39.2	37.9
87.5°	14.4	15.7	18.3	18.3	19.6	19.6	18.3	19.6	19.6	18.3	17.0
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: P997654

CATALOG NUMBER: SA2XXDP-B865DB27-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5
2.5°	1768.2	1769.5	1772.1	1785.2	1791.7	1793.0	1787.8	1799.6	1803.5	1799.6	1797.0
5°	1851.9	1859.7	1875.4	1892.4	1891.1	1892.4	1900.3	1908.1	1910.7	1900.3	1904.2
7.5°	1925.1	1940.8	1957.8	1984.0	1984.0	1997.1	2002.3	2008.8	2024.5	2016.7	2014.1
10°	2008.8	2029.8	2061.1	2103.0	2104.3	2117.4	2130.5	2151.4	2157.9	2152.7	2155.3
12.5°	2113.5	2154.0	2156.6	2202.4	2223.3	2225.9	2246.9	2242.9	2256.0	2256.0	2278.2
15°	2159.2	2222.0	2257.3	2301.8	2314.9	2299.2	2316.2	2334.5	2335.8	2335.8	2334.5
17.5°	2241.6	2266.5	2301.8	2325.3	2330.6	2330.6	2331.9	2339.7	2334.5	2324.0	2331.9
20°	2258.6	2269.1	2282.2	2279.5	2282.2	2269.1	2256.0	2242.9	2244.2	2237.7	2257.3
22.5°	2227.2	2224.6	2194.5	2174.9	2174.9	2148.8	2123.9	2112.1	2100.4	2104.3	2110.8
25°	2148.8	2108.2	2071.6	2042.8	2036.3	1994.4	1960.4	1950.0	1930.4	1946.1	1948.7
27.5°	2023.2	1977.4	1918.6	1893.7	1859.7	1842.7	1819.2	1787.8	1747.3	1770.8	1766.9
30°	1888.5	1820.5	1772.1	1712.0	1658.3	1654.4	1609.9	1557.6	1536.7	1536.7	1548.5
32.5°	1738.1	1647.9	1577.2	1492.2	1439.9	1417.7	1364.1	1311.8	1323.5	1284.3	1298.7
35°	1562.9	1443.8	1354.9	1272.5	1233.3	1207.1	1137.8	1109.0	1077.7	1059.3	1093.3
37.5°	1395.5	1258.1	1144.4	1054.1	1039.7	992.6	945.6	927.3	908.9	916.8	915.5
40°	1191.4	1069.8	967.8	897.2	872.3	850.1	818.7	796.5	784.7	791.2	792.5
42.5°	1007.0	905.0	829.2	779.5	758.5	742.8	727.2	708.8	704.9	704.9	710.2
45°	864.5	780.8	729.8	689.2	677.5	665.7	653.9	646.1	643.5	638.2	642.1
47.5°	750.7	684.0	652.6	622.5	609.4	606.8	596.4	592.4	587.2	585.9	587.2
50°	655.2	613.4	584.6	567.6	558.4	554.5	549.3	541.4	538.8	545.4	542.7
52.5°	588.5	549.3	533.6	516.6	511.4	506.1	498.3	499.6	498.3	495.7	495.7
55°	521.8	497.0	481.3	468.2	466.9	461.7	455.1	452.5	451.2	448.6	452.5
57.5°	468.2	448.6	434.2	422.4	417.2	417.2	410.7	405.4	405.4	404.1	405.4
60°	414.6	395.0	385.8	374.0	370.1	368.8	364.9	362.3	358.3	358.3	358.3
62.5°	364.9	349.2	338.7	328.3	329.6	323.0	317.8	315.2	315.2	316.5	316.5
65°	317.8	307.3	294.3	285.1	282.5	281.2	278.6	277.3	273.3	276.0	276.0
67.5°	274.6	260.3	252.4	248.5	244.6	243.3	240.6	238.0	236.7	235.4	238.0
70°	231.5	219.7	213.2	210.6	206.6	205.3	204.0	200.1	201.4	202.7	204.0
72.5°	192.3	181.8	180.5	172.6	172.6	172.6	167.4	170.0	168.7	166.1	168.7
75°	151.7	146.5	143.9	139.9	141.2	139.9	138.6	134.7	134.7	136.0	137.3
77.5°	120.3	115.1	113.8	109.9	107.2	109.9	107.2	105.9	105.9	107.2	107.2
80°	88.9	86.3	82.4	82.4	82.4	81.1	81.1	81.1	79.8	78.5	79.8
82.5°	58.9	58.9	57.5	56.2	57.5	54.9	56.2	56.2	56.2	56.2	56.2
85°	37.9	36.6	36.6	35.3	35.3	35.3	36.6	34.0	34.0	35.3	35.3
87.5°	17.0	17.0	17.0	18.3	17.0	17.0	17.0	18.3	17.0	17.0	17.0
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: P997654

CATALOG NUMBER: SA2XXDP-B865DB27-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5
2.5°	1803.5	1794.3	1786.5	1787.8	1794.3	1789.1	1776.0	1759.0	1752.5	1744.6	1752.5
5°	1912.0	1904.2	1888.5	1889.8	1885.9	1880.7	1859.7	1833.6	1833.6	1812.7	1810.0
7.5°	2019.3	2007.5	1997.1	1994.4	1980.1	1969.6	1951.3	1914.7	1900.3	1875.4	1861.0
10°	2139.6	2130.5	2118.7	2104.3	2096.5	2078.1	2048.1	1994.4	1968.3	1934.3	1909.4
12.5°	2261.2	2259.9	2233.8	2205.0	2203.7	2174.9	2154.0	2082.1	2046.8	2001.0	1942.1
15°	2338.4	2331.9	2317.5	2303.1	2307.0	2275.6	2228.5	2143.5	2120.0	2065.1	2002.3
17.5°	2337.1	2337.1	2333.2	2330.6	2326.6	2317.5	2291.3	2235.1	2197.2	2127.8	2069.0
20°	2262.5	2279.5	2283.5	2282.2	2295.2	2301.8	2300.5	2265.2	2235.1	2173.6	2113.5
22.5°	2113.5	2152.7	2169.7	2180.2	2207.6	2222.0	2256.0	2242.9	2235.1	2189.3	2138.3
25°	1974.8	1987.9	2038.9	2041.5	2079.5	2114.8	2148.8	2171.0	2199.8	2182.8	2139.6
27.5°	1795.7	1825.7	1862.4	1889.8	1897.7	1969.6	2025.8	2067.7	2133.1	2138.3	2123.9
30°	1592.9	1607.3	1667.5	1704.1	1746.0	1798.3	1879.4	1951.3	2010.1	2063.8	2082.1
32.5°	1345.8	1404.6	1439.9	1484.4	1521.0	1613.9	1713.3	1806.1	1874.1	1964.4	2003.6
35°	1119.5	1165.3	1225.4	1243.7	1310.4	1388.9	1518.4	1637.4	1740.7	1832.3	1912.0
37.5°	932.5	969.1	1033.2	1062.0	1101.2	1201.9	1310.4	1458.2	1582.5	1694.9	1794.3
40°	804.3	831.8	880.2	889.3	922.0	1013.6	1101.2	1239.8	1404.6	1556.3	1664.9
42.5°	716.7	729.8	762.5	774.2	795.2	856.6	935.1	1065.9	1218.9	1375.8	1528.9
45°	653.9	663.1	682.7	693.2	719.3	746.8	810.9	915.5	1035.8	1194.0	1358.8
47.5°	597.7	609.4	617.3	623.8	638.2	668.3	710.2	787.3	902.4	1047.6	1207.1
50°	550.6	554.5	568.9	570.2	579.4	599.0	638.2	685.3	776.9	894.6	1048.9
52.5°	503.5	507.4	516.6	525.7	529.7	545.4	571.5	610.8	678.8	771.6	908.9
55°	456.4	461.7	470.8	477.4	481.3	494.4	510.1	548.0	601.6	667.0	779.5
57.5°	409.4	421.1	423.7	427.7	434.2	448.6	463.0	485.2	527.1	587.2	669.6
60°	364.9	368.8	378.0	381.9	388.4	396.3	414.6	431.6	461.7	508.7	583.3
62.5°	319.1	328.3	332.2	336.1	341.3	350.5	362.3	380.6	406.7	444.7	503.5
65°	279.9	281.2	289.0	294.3	299.5	306.0	317.8	334.8	350.5	385.8	429.0
67.5°	241.9	244.6	247.2	252.4	259.0	265.5	276.0	285.1	304.7	328.3	362.3
70°	205.3	205.3	211.9	215.8	214.5	222.3	230.2	240.6	255.0	277.3	304.7
72.5°	172.6	171.3	176.6	177.9	180.5	185.7	190.9	201.4	209.3	226.3	247.2
75°	137.3	139.9	142.6	142.6	146.5	150.4	155.6	160.9	170.0	180.5	196.2
77.5°	108.5	108.5	111.2	112.5	116.4	115.1	120.3	125.6	132.1	141.2	153.0
80°	79.8	82.4	82.4	82.4	83.7	85.0	90.2	94.2	98.1	104.6	109.9
82.5°	56.2	56.2	58.9	58.9	58.9	61.5	61.5	62.8	65.4	69.3	73.2
85°	35.3	35.3	35.3	36.6	35.3	36.6	39.2	37.9	39.2	41.9	41.9
87.5°	17.0	17.0	17.0	17.0	17.0	18.3	17.0	18.3	19.6	19.6	19.6
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: P997654

CATALOG NUMBER: SA2XXDP-B865DB27-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5
2.5°	1746.0	1739.4	1735.5	1738.1	1730.3	1710.6	1710.6	1717.2	1709.3	1701.5	1689.7
5°	1794.3	1781.3	1773.4	1772.1	1753.8	1722.4	1715.9	1709.3	1692.3	1674.0	1654.4
7.5°	1841.4	1817.9	1804.8	1795.7	1769.5	1729.0	1712.0	1697.6	1670.1	1642.6	1617.8
10°	1880.7	1846.7	1831.0	1816.6	1782.6	1731.6	1704.1	1677.9	1642.6	1607.3	1575.9
12.5°	1912.0	1872.8	1853.2	1832.3	1790.4	1723.7	1689.7	1647.9	1612.6	1565.5	1534.1
15°	1964.4	1883.3	1865.0	1845.3	1802.2	1710.6	1668.8	1621.7	1573.3	1510.5	1476.5
17.5°	2006.2	1897.7	1896.4	1854.5	1798.3	1705.4	1641.3	1579.9	1527.5	1464.8	1411.1
20°	2031.1	1919.9	1899.0	1855.8	1785.2	1670.1	1603.4	1535.4	1479.2	1403.3	1349.7
22.5°	2052.0	1951.3	1896.4	1844.0	1757.7	1658.3	1560.2	1496.2	1419.0	1336.6	1285.6
25°	2059.8	1957.8	1900.3	1840.1	1738.1	1624.3	1513.2	1443.8	1357.5	1283.0	1213.7
27.5°	2061.1	1956.5	1885.9	1823.1	1710.6	1579.9	1466.1	1392.8	1297.4	1211.1	1141.7
30°	2048.1	1942.1	1878.0	1810.0	1684.5	1539.3	1408.5	1327.4	1225.4	1139.1	1067.2
32.5°	2008.8	1913.4	1861.0	1786.5	1650.5	1483.1	1353.6	1263.4	1156.1	1071.1	1001.8
35°	1943.4	1878.0	1820.5	1751.2	1606.0	1430.8	1298.7	1192.7	1084.2	1003.1	937.7
37.5°	1862.4	1827.0	1773.4	1705.4	1555.0	1383.7	1237.2	1119.5	1011.0	932.5	868.4
40°	1752.5	1761.6	1709.3	1647.9	1494.9	1319.6	1157.4	1045.0	942.9	869.7	806.9
42.5°	1633.5	1671.4	1641.3	1582.5	1428.2	1249.0	1098.6	974.3	874.9	799.1	746.8
45°	1505.3	1570.7	1552.4	1509.2	1358.8	1174.4	1014.9	894.6	806.9	733.7	687.9
47.5°	1365.4	1458.2	1458.2	1426.8	1281.7	1099.9	942.9	820.0	733.7	681.4	636.9
50°	1222.8	1327.4	1344.4	1323.5	1195.4	1014.9	855.3	744.2	669.6	618.6	585.9
52.5°	1073.7	1195.4	1226.7	1216.3	1103.8	933.8	783.4	674.8	606.8	562.4	533.6
55°	931.2	1072.4	1106.4	1110.3	1005.7	844.9	703.6	608.1	542.7	512.7	487.8
57.5°	796.5	932.5	970.4	976.9	906.3	763.8	629.1	545.4	486.5	461.7	442.0
60°	681.4	795.2	844.9	859.2	797.8	669.6	559.8	478.7	434.2	410.7	392.3
62.5°	587.2	678.8	731.1	735.0	707.5	587.2	487.8	419.8	381.9	361.0	351.8
65°	495.7	578.1	609.4	625.1	602.9	508.7	421.1	364.9	334.8	316.5	307.3
67.5°	422.4	474.7	500.9	521.8	499.6	429.0	358.3	312.6	290.3	272.0	266.8
70°	346.6	389.7	409.4	430.3	410.7	357.0	306.0	264.2	244.6	230.2	223.6
72.5°	277.3	311.3	329.6	342.7	330.9	286.4	244.6	215.8	201.4	190.9	187.0
75°	219.7	243.3	253.7	262.9	257.6	223.6	197.5	173.9	160.9	151.7	149.1
77.5°	167.4	184.4	196.2	198.8	192.3	170.0	147.8	133.4	122.9	117.7	115.1
80°	119.0	129.5	136.0	139.9	133.4	124.2	108.5	98.1	88.9	82.4	81.1
82.5°	79.8	85.0	90.2	88.9	86.3	78.5	69.3	64.1	60.2	54.9	54.9
85°	45.8	47.1	49.7	51.0	49.7	44.5	39.2	36.6	34.0	30.1	30.1
87.5°	19.6	20.9	20.9	22.2	19.6	19.6	17.0	14.4	14.4	13.1	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: P997654

CATALOG NUMBER: SA2XXDP-B865DB27-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5
2.5°	1683.2	1689.7	1688.4	1675.3	1660.9	1649.2	1626.9	1629.6	1621.7	1623.0	1630.9
5°	1641.3	1641.3	1636.1	1617.8	1594.2	1581.2	1556.3	1549.8	1534.1	1532.8	1531.5
7.5°	1596.9	1590.3	1583.8	1557.6	1528.9	1507.9	1473.9	1466.1	1450.4	1439.9	1434.7
10°	1544.5	1535.4	1522.3	1492.2	1456.9	1430.8	1395.5	1385.0	1354.9	1341.8	1334.0
12.5°	1487.0	1481.8	1460.8	1436.0	1378.5	1349.7	1298.7	1309.1	1279.1	1252.9	1249.0
15°	1429.5	1409.8	1398.1	1357.5	1288.2	1275.1	1234.6	1213.7	1186.2	1165.3	1165.3
17.5°	1373.2	1343.1	1317.0	1273.8	1222.8	1186.2	1156.1	1145.7	1111.7	1090.7	1086.8
20°	1298.7	1264.7	1258.1	1196.7	1161.4	1120.8	1092.0	1065.9	1041.0	1031.9	1025.3
22.5°	1228.1	1188.8	1178.4	1126.0	1090.7	1050.2	1021.4	1003.1	984.8	978.3	966.5
25°	1152.2	1128.7	1113.0	1056.7	1017.5	979.6	959.9	946.9	929.9	928.6	920.7
27.5°	1079.0	1056.7	1041.0	987.4	958.6	923.3	907.6	893.2	884.1	880.2	876.2
30°	1016.2	991.3	973.0	933.8	898.5	869.7	856.6	847.5	842.2	835.7	834.4
32.5°	946.9	932.5	907.6	877.6	850.1	822.6	814.8	808.2	800.4	797.8	796.5
35°	888.0	868.4	852.7	818.7	806.9	783.4	774.2	769.0	758.5	755.9	753.3
37.5°	830.5	812.2	795.2	774.2	752.0	738.9	733.7	725.8	720.6	721.9	719.3
40°	772.9	758.5	745.5	723.2	710.2	703.6	693.2	685.3	682.7	684.0	682.7
42.5°	716.7	703.6	695.8	678.8	665.7	659.1	652.6	644.8	648.7	648.7	652.6
45°	665.7	653.9	648.7	635.6	627.8	617.3	610.8	609.4	614.7	613.4	613.4
47.5°	613.4	609.4	602.9	591.1	580.7	574.1	572.8	572.8	578.1	580.7	579.4
50°	572.8	565.0	557.1	548.0	540.1	537.5	533.6	536.2	541.4	541.4	544.1
52.5°	521.8	516.6	514.0	506.1	500.9	500.9	500.9	502.2	506.1	510.1	508.7
55°	477.4	473.4	470.8	466.9	460.4	461.7	460.4	463.0	466.9	470.8	473.4
57.5°	430.3	429.0	426.4	419.8	419.8	418.5	422.4	423.7	430.3	432.9	436.8
60°	388.4	384.5	384.5	379.3	379.3	379.3	383.2	387.1	392.3	393.7	396.3
62.5°	344.0	344.0	342.7	338.7	338.7	342.7	344.0	349.2	351.8	351.8	355.7
65°	302.1	300.8	299.5	300.8	302.1	302.1	306.0	308.6	311.3	312.6	313.9
67.5°	260.3	259.0	261.6	260.3	262.9	268.1	266.8	270.7	274.6	274.6	276.0
70°	221.0	223.6	222.3	224.9	223.6	226.3	230.2	231.5	231.5	232.8	236.7
72.5°	184.4	184.4	184.4	183.1	184.4	187.0	189.6	190.9	193.6	194.9	198.8
75°	149.1	149.1	146.5	149.1	149.1	151.7	154.3	154.3	154.3	156.9	160.9
77.5°	112.5	113.8	112.5	115.1	115.1	116.4	119.0	117.7	120.3	121.6	122.9
80°	82.4	81.1	81.1	81.1	82.4	82.4	85.0	86.3	86.3	90.2	87.6
82.5°	52.3	53.6	52.3	53.6	53.6	54.9	53.6	54.9	56.2	58.9	57.5
85°	30.1	28.8	28.8	30.1	28.8	28.8	30.1	28.8	30.1	28.8	30.1
87.5°	11.8	10.5	10.5	10.5	10.5	9.2	9.2	7.8	7.8	7.8	6.5
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: P997654

CATALOG NUMBER: SA2XXDP-B865DB27-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5
2.5°	1621.7	1625.6	1616.5	1613.9	1616.5	1607.3	1609.9	1612.6	1612.6	1616.5	1619.1
5°	1527.5	1522.3	1513.2	1510.5	1507.9	1511.9	1509.2	1513.2	1514.5	1523.6	1524.9
7.5°	1434.7	1426.8	1419.0	1411.1	1408.5	1402.0	1408.5	1408.5	1417.7	1415.1	1421.6
10°	1324.8	1323.5	1313.1	1309.1	1303.9	1293.4	1307.8	1303.9	1310.4	1322.2	1324.8
12.5°	1243.7	1229.4	1235.9	1217.6	1224.1	1213.7	1215.0	1215.0	1225.4	1226.7	1224.1
15°	1166.6	1154.8	1137.8	1130.0	1126.0	1120.8	1137.8	1139.1	1131.3	1149.6	1143.0
17.5°	1088.1	1088.1	1072.4	1068.5	1058.0	1063.3	1060.7	1062.0	1059.3	1072.4	1079.0
20°	1020.1	1013.6	1008.3	1009.6	996.6	994.0	991.3	994.0	1003.1	1012.3	1014.9
22.5°	965.2	961.3	948.2	950.8	940.3	944.3	941.6	948.2	949.5	949.5	958.6
25°	912.9	907.6	908.9	903.7	899.8	899.8	895.9	899.8	905.0	907.6	908.9
27.5°	873.6	869.7	863.2	859.2	861.9	855.3	860.6	864.5	864.5	861.9	864.5
30°	826.5	829.2	829.2	816.1	821.3	818.7	822.6	825.2	825.2	826.5	823.9
32.5°	795.2	787.3	786.0	784.7	784.7	779.5	779.5	783.4	784.7	786.0	789.9
35°	753.3	753.3	746.8	750.7	745.5	746.8	745.5	746.8	749.4	745.5	749.4
37.5°	715.4	716.7	714.1	716.7	718.0	715.4	712.8	718.0	715.4	715.4	712.8
40°	682.7	681.4	682.7	682.7	682.7	684.0	681.4	681.4	681.4	678.8	676.1
42.5°	655.2	647.4	650.0	651.3	647.4	647.4	648.7	647.4	651.3	643.5	643.5
45°	616.0	613.4	614.7	614.7	617.3	613.4	616.0	617.3	613.4	612.1	609.4
47.5°	580.7	583.3	580.7	583.3	583.3	585.9	580.7	582.0	583.3	578.1	574.1
50°	545.4	545.4	549.3	548.0	549.3	546.7	546.7	545.4	546.7	544.1	540.1
52.5°	512.7	508.7	515.3	514.0	512.7	511.4	510.1	511.4	508.7	506.1	506.1
55°	472.1	472.1	476.1	477.4	477.4	474.7	472.1	473.4	472.1	470.8	469.5
57.5°	439.4	434.2	436.8	438.1	438.1	434.2	436.8	434.2	434.2	435.5	431.6
60°	397.6	397.6	395.0	398.9	398.9	396.3	396.3	397.6	395.0	393.7	392.3
62.5°	353.1	354.4	358.3	359.7	361.0	358.3	355.7	357.0	357.0	353.1	354.4
65°	315.2	317.8	323.0	321.7	319.1	320.4	317.8	319.1	315.2	316.5	312.6
67.5°	278.6	277.3	278.6	278.6	281.2	279.9	277.3	277.3	276.0	279.9	276.0
70°	239.3	239.3	239.3	239.3	240.6	241.9	239.3	236.7	238.0	235.4	234.1
72.5°	198.8	200.1	198.8	201.4	197.5	200.1	200.1	198.8	197.5	197.5	197.5
75°	160.9	163.5	159.6	160.9	159.6	162.2	160.9	160.9	158.2	156.9	158.2
77.5°	122.9	124.2	121.6	122.9	121.6	122.9	122.9	121.6	121.6	121.6	121.6
80°	87.6	88.9	87.6	86.3	85.0	87.6	85.0	86.3	87.6	86.3	88.9
82.5°	56.2	56.2	54.9	56.2	53.6	53.6	54.9	54.9	53.6	56.2	53.6
85°	27.5	27.5	30.1	27.5	26.2	26.2	26.2	27.5	26.2	28.8	27.5
87.5°	6.5	5.2	6.5	6.5	5.2	5.2	6.5	5.2	6.5	7.8	5.2
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: P997654

CATALOG NUMBER: SA2XXDP-B865DB27-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5	1701.5
2.5°	1615.2	1625.6	1621.7	1607.3	1624.3	1624.3	1636.1	1636.1	1650.5	1655.7	1663.6
5°	1523.6	1531.5	1538.0	1531.5	1543.2	1561.5	1572.0	1581.2	1600.8	1608.6	1620.4
7.5°	1425.5	1439.9	1446.5	1446.5	1466.1	1487.0	1507.9	1521.0	1548.5	1558.9	1570.7
10°	1330.1	1347.1	1360.1	1358.8	1391.5	1404.6	1430.8	1460.8	1488.3	1504.0	1521.0
12.5°	1229.4	1238.5	1256.8	1283.0	1290.8	1314.4	1344.4	1382.4	1432.1	1446.5	1471.3
15°	1145.7	1170.5	1184.9	1196.7	1215.0	1237.2	1269.9	1306.5	1356.2	1387.6	1413.8
17.5°	1075.0	1107.7	1116.9	1114.3	1137.8	1171.8	1209.7	1237.2	1281.7	1319.6	1344.4
20°	1017.5	1030.6	1046.3	1052.8	1071.1	1107.7	1144.4	1175.7	1212.4	1242.4	1271.2
22.5°	959.9	970.4	983.5	995.3	1009.6	1030.6	1065.9	1105.1	1140.4	1169.2	1201.9
25°	912.9	919.4	931.2	940.3	956.0	970.4	995.3	1038.4	1080.3	1097.3	1126.0
27.5°	867.1	872.3	880.2	890.6	898.5	912.9	935.1	970.4	1013.6	1030.6	1069.8
30°	826.5	830.5	838.3	843.6	847.5	864.5	881.5	908.9	941.6	965.2	994.0
32.5°	788.6	792.5	800.4	801.7	806.9	816.1	831.8	856.6	885.4	905.0	929.9
35°	746.8	749.4	757.2	759.8	763.8	771.6	783.4	801.7	827.9	842.2	864.5
37.5°	714.1	712.8	718.0	721.9	727.2	731.1	735.0	753.3	772.9	786.0	803.0
40°	678.8	676.1	677.5	682.7	685.3	690.5	690.5	708.8	721.9	732.4	745.5
42.5°	643.5	642.1	639.5	642.1	644.8	646.1	647.4	660.5	673.5	682.7	697.1
45°	608.1	606.8	604.2	605.5	605.5	608.1	612.1	617.3	626.5	634.3	642.1
47.5°	575.4	572.8	568.9	567.6	570.2	570.2	570.2	575.4	584.6	587.2	595.1
50°	541.4	537.5	532.3	529.7	529.7	528.4	531.0	532.3	540.1	542.7	549.3
52.5°	504.8	502.2	497.0	491.7	493.1	490.4	491.7	493.1	495.7	499.6	503.5
55°	468.2	463.0	459.0	457.7	453.8	453.8	449.9	455.1	453.8	455.1	460.4
57.5°	432.9	427.7	421.1	418.5	414.6	413.3	410.7	409.4	410.7	414.6	418.5
60°	391.0	388.4	384.5	380.6	378.0	374.0	371.4	371.4	370.1	370.1	371.4
62.5°	350.5	349.2	344.0	342.7	340.0	337.4	333.5	330.9	330.9	333.5	334.8
65°	311.3	310.0	306.0	304.7	298.2	295.6	294.3	293.0	290.3	290.3	290.3
67.5°	274.6	270.7	270.7	264.2	259.0	256.3	253.7	252.4	252.4	252.4	253.7
70°	234.1	234.1	230.2	226.3	221.0	222.3	218.4	214.5	214.5	211.9	213.2
72.5°	194.9	193.6	189.6	188.3	184.4	180.5	177.9	180.5	176.6	175.2	176.6
75°	156.9	155.6	153.0	150.4	151.7	147.8	143.9	142.6	142.6	139.9	139.9
77.5°	120.3	122.9	117.7	116.4	113.8	111.2	109.9	108.5	108.5	108.5	111.2
80°	83.7	85.0	85.0	82.4	83.7	79.8	79.8	79.8	75.9	77.2	78.5
82.5°	53.6	53.6	52.3	53.6	52.3	52.3	51.0	51.0	49.7	49.7	51.0
85°	30.1	28.8	27.5	30.1	28.8	28.8	27.5	27.5	27.5	27.5	27.5
87.5°	6.5	7.8	7.8	7.8	7.8	9.2	9.2	9.2	10.5	10.5	10.5
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: P997654

CATALOG NUMBER: SA2XXDP-B865DB27-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	1701.5	1701.5	1701.5	1701.5
2.5°	1670.1	1670.1	1689.7	1710.6
5°	1633.5	1642.6	1674.0	1702.8
7.5°	1598.2	1613.9	1653.1	1689.7
10°	1555.0	1575.9	1624.3	1667.5
12.5°	1513.2	1532.8	1589.0	1637.4
15°	1454.3	1479.2	1539.3	1599.5
17.5°	1395.5	1420.3	1493.5	1564.2
20°	1326.1	1358.8	1441.2	1535.4
22.5°	1262.1	1302.6	1394.1	1470.0
25°	1191.4	1254.2	1339.2	1437.3
27.5°	1128.7	1191.4	1277.8	1377.1
30°	1058.0	1122.1	1211.1	1302.6
32.5°	990.0	1048.9	1135.2	1247.7
35°	919.4	975.6	1059.3	1173.1
37.5°	855.3	910.3	1001.8	1106.4
40°	792.5	850.1	928.6	1033.2
42.5°	733.7	784.7	855.3	959.9
45°	680.1	716.7	782.1	880.2
47.5°	623.8	656.5	716.7	814.8
50°	571.5	599.0	651.3	742.8
52.5°	520.5	544.1	592.4	665.7
55°	474.7	497.0	532.3	604.2
57.5°	427.7	444.7	478.7	536.2
60°	381.9	397.6	425.0	472.1
62.5°	336.1	349.2	375.3	413.3
65°	295.6	306.0	325.6	358.3
67.5°	256.3	262.9	278.6	304.7
70°	218.4	223.6	236.7	257.6
72.5°	177.9	183.1	197.5	211.9
75°	143.9	145.2	155.6	167.4
77.5°	112.5	111.2	119.0	128.2
80°	77.2	81.1	87.6	91.5
82.5°	52.3	53.6	56.2	58.9
85°	28.8	30.1	30.1	34.0
87.5°	11.8	13.1	13.1	14.4
90°	0.0	0.0	0.0	0.0

TEST NUMBER: P997654

CATALOG NUMBER: SA2XXDP-B865DB27-4F0-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	23.41	24.93	23.78	25.24	25.56	19.68	21.20	20.05	21.51	21.83
	3H	24.53	25.89	24.91	26.22	26.58	21.09	22.45	21.47	22.78	23.14
	4H	24.85	26.13	25.25	26.48	26.86	21.60	22.88	22.00	23.23	23.60
	6H	25.04	26.22	25.45	26.59	26.98	21.96	23.14	22.37	23.50	23.90
	8H	25.08	26.21	25.51	26.60	27.00	22.07	23.19	22.50	23.58	23.98
	12H	25.10	26.17	25.53	26.55	26.98	22.14	23.22	22.57	23.60	24.03
4H	2H	23.53	24.81	23.93	25.16	25.54	20.48	21.75	20.88	22.10	22.48
	3H	24.86	25.92	25.27	26.32	26.73	22.05	23.11	22.47	23.51	23.92
	4H	25.34	26.29	25.77	26.71	27.15	22.65	23.61	23.09	24.02	24.46
	6H	25.67	26.50	26.12	26.94	27.40	23.11	23.94	23.56	24.38	24.84
	8H	25.74	26.52	26.21	26.96	27.43	23.25	24.03	23.71	24.47	24.94
	12H	25.79	26.48	26.27	26.96	27.43	23.36	24.05	23.84	24.53	25.00
8H	4H	25.42	26.20	25.89	26.64	27.11	23.06	23.84	23.53	24.28	24.75
	6H	25.83	26.47	26.33	26.96	27.44	23.60	24.24	24.10	24.74	25.21
	8H	25.96	26.53	26.47	27.04	27.53	23.80	24.38	24.32	24.89	25.37
	12H	26.05	26.55	26.56	27.05	27.61	23.97	24.47	24.48	24.97	25.53
12H	4H	25.41	26.11	25.90	26.58	27.05	23.12	23.81	23.60	24.29	24.76
	6H	25.82	26.40	26.34	26.91	27.40	23.68	24.25	24.19	24.76	25.25
	8H	25.99	26.50	26.50	26.99	27.55	23.93	24.44	24.44	24.93	25.49