

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: P997769

Luminaire Tested: SA2XXRDP-B865DB2750-4F0-XX-W2A-A_4000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997769
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-B865DB2750-4F0-XX-W2A-A_4000K
Description: Define 2 Regressed Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

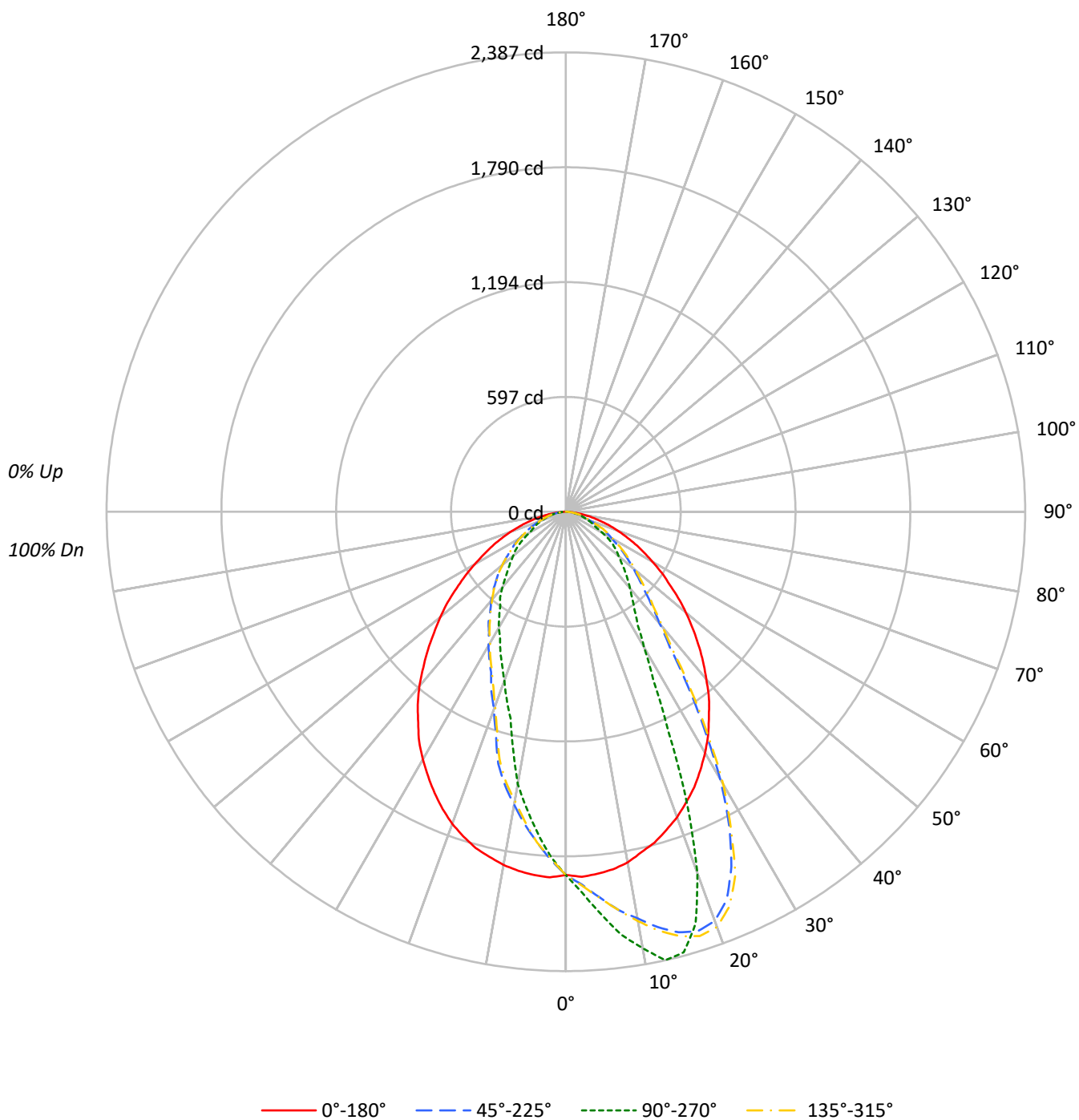
Lumens per Lamp: N/A
Luminaire Lumens: 3261.0 lumens
Efficiency: N/A
Efficacy: 69.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P997769

CATALOG NUMBER: SA2XXRDP-B865DB2750-4F0-XX-W2A-A_4000K

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°	29870	29870	29870	29870
5°	30005	33361	30109	26650
10°	29741	37012	29951	23101
15°	29162	38832	29655	18202
20°	28452	33665	29070	15750
25°	27577	22078	28170	14063
30°	26437	14860	27156	12727
35°	25036	12037	25848	11478
40°	23466	10704	24468	10621
45°	21782	9686	22693	9483
50°	20053	8816	20991	8784
55°	18132	8288	19109	8180
60°	16440	6933	17311	6851
65°	14881	5843	15765	6630
70°	13172	5401	14204	6253
75°	11388	5052	12434	5773
80°	9444	4658	10164	5141
85°	7392	4286	8100	4522

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 160°

Vertical Angle: 45°

Luminance: 32791 cd/sqm

TEST NUMBER: P997769

CATALOG NUMBER: SA2XXRDP-B865DB2750-4F0-XX-W2A-A_4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.0	5.5
10°-20°	499.6	15.3
20°-30°	643.0	19.7
30°-40°	610.0	18.7
40°-50°	522.8	16.0
50°-60°	398.1	12.2
60°-70°	251.1	7.7
70°-80°	125.3	3.8
80°-90°	32.2	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°	1321.6	40.5
0°-40°	1931.6	59.2
0°-60°	2852.5	87.5
0°-90°	3261.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3261.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1887	1887	1887	1887	1887	
5°	1888	2100	1895	1677	1888	179
15°	1780	2370	1810	1111	1780	501
25°	1579	1264	1613	805	1579	725
35°	1296	623	1338	594	1296	811
45°	973	433	1014	424	973	751
55°	657	300	692	296	657	592
65°	397	156	421	177	397	394
75°	186	83	203	94	186	202
85°	41	24	45	25	41	49
90°	0	0	0	0	0	

TEST NUMBER: P997769

CATALOG NUMBER: SA2XXRDP-B865DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0
2.5°	1898.8	1906.7	1910.6	1915.9	1927.7	1935.5	1947.3	1950.0	1948.7	1953.9	1939.5
5°	1888.3	1905.4	1921.1	1934.2	1955.2	1968.3	1982.7	1999.8	2003.7	2023.4	2011.6
7.5°	1873.9	1898.8	1921.1	1947.3	1978.8	1995.9	2018.2	2044.4	2056.2	2079.8	2086.3
10°	1850.3	1885.7	1923.7	1951.3	1994.5	2024.7	2045.7	2087.7	2115.2	2150.6	2145.4
12.5°	1812.3	1858.2	1909.3	1955.2	2011.6	2031.3	2070.6	2113.9	2149.3	2182.1	2210.9
15°	1779.5	1831.9	1888.3	1944.7	2009.0	2045.7	2085.0	2141.4	2179.4	2237.1	2262.1
17.5°	1734.9	1801.8	1868.7	1931.6	2007.7	2049.6	2098.1	2153.2	2209.6	2264.7	2284.4
20°	1689.0	1761.1	1833.3	1918.5	2005.0	2045.7	2095.5	2163.7	2218.8	2262.1	2262.1
22.5°	1633.9	1721.8	1804.4	1885.7	1980.1	2039.1	2090.3	2170.3	2209.6	2218.8	2183.4
25°	1578.9	1666.7	1757.2	1858.2	1965.7	2018.2	2075.9	2150.6	2163.7	2127.0	2035.2
27.5°	1513.3	1611.6	1713.9	1822.8	1935.5	2001.1	2053.6	2103.4	2078.5	1980.1	1837.2
30°	1446.4	1552.6	1668.0	1771.6	1908.0	1968.3	2012.9	2027.3	1948.7	1788.7	1603.8
32.5°	1376.9	1480.5	1602.5	1727.0	1864.7	1922.4	1951.3	1913.2	1769.0	1567.1	1341.5
35°	1295.6	1412.3	1539.5	1669.3	1805.7	1849.0	1866.0	1772.9	1588.0	1327.1	1102.8
37.5°	1222.2	1338.9	1475.3	1607.7	1740.1	1763.8	1746.7	1601.1	1366.4	1108.1	889.1
40°	1135.6	1260.2	1394.0	1542.1	1651.0	1657.5	1615.6	1426.7	1135.6	893.0	758.0
42.5°	1055.6	1181.5	1315.3	1466.1	1548.7	1526.4	1470.0	1222.2	948.1	769.8	660.9
45°	973.0	1092.3	1236.6	1370.3	1429.4	1376.9	1291.7	1028.1	796.0	662.2	578.3
47.5°	893.0	1004.5	1147.4	1275.9	1286.4	1227.4	1126.4	861.5	689.8	582.2	514.0
50°	814.3	925.8	1059.6	1165.8	1155.3	1074.0	959.9	748.8	599.3	514.0	457.7
52.5°	735.7	836.6	966.5	1050.4	1005.8	927.1	814.3	634.7	523.2	448.5	405.2
55°	657.0	751.4	862.9	932.4	861.5	771.1	691.1	544.2	453.7	393.4	360.6
57.5°	591.4	666.2	768.4	810.4	725.2	654.4	584.9	468.1	393.4	350.1	312.1
60°	519.3	587.5	671.4	696.3	608.5	550.8	491.8	396.0	337.0	299.0	274.1
62.5°	457.7	514.0	578.3	578.3	500.9	457.7	413.1	331.8	283.2	253.1	241.3
65°	397.3	438.0	483.9	478.6	413.1	375.0	339.6	274.1	237.4	216.4	204.6
67.5°	338.3	369.8	400.0	381.6	334.4	301.6	268.8	221.6	196.7	182.3	166.5
70°	284.6	309.5	325.2	308.2	261.0	233.4	209.8	178.3	158.7	140.3	131.1
72.5°	238.7	249.2	254.4	233.4	194.1	178.3	161.3	139.0	122.0	112.8	110.2
75°	186.2	195.4	191.5	175.7	142.9	131.1	118.0	102.3	98.4	93.1	90.5
77.5°	145.6	145.6	139.0	124.6	102.3	93.1	87.9	80.0	76.1	74.7	72.1
80°	103.6	102.3	98.4	82.6	69.5	64.3	64.3	59.0	57.7	55.1	55.1
82.5°	68.2	68.2	62.9	49.8	45.9	44.6	43.3	40.7	40.7	39.3	39.3
85°	40.7	38.0	31.5	27.5	26.2	26.2	24.9	23.6	24.9	23.6	23.6
87.5°	18.4	14.4	10.5	10.5	10.5	10.5	10.5	10.5	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: P997769

CATALOG NUMBER: SA2XXRDP-B865DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0
2.5°	1953.9	1956.5	1960.5	1978.8	1981.4	1986.7	1984.1	1984.1	1985.4	1982.7	1984.1
5°	2037.8	2041.8	2061.4	2083.7	2089.0	2083.7	2090.3	2099.5	2099.5	2099.5	2096.8
7.5°	2116.5	2130.9	2153.2	2186.0	2192.6	2199.1	2210.9	2203.1	2205.7	2217.5	2213.5
10°	2192.6	2213.5	2238.5	2266.0	2280.4	2289.6	2294.8	2306.6	2334.2	2302.7	2314.5
12.5°	2264.7	2294.8	2321.1	2351.2	2361.7	2373.5	2377.5	2387.9	2387.9	2386.6	2395.8
15°	2311.9	2339.4	2363.0	2382.7	2385.3	2382.7	2380.1	2381.4	2385.3	2369.6	2378.8
17.5°	2322.4	2325.0	2332.9	2325.0	2326.3	2298.8	2283.0	2279.1	2242.4	2243.7	2273.9
20°	2271.2	2226.7	2214.9	2171.6	2145.4	2074.5	2071.9	2052.2	1974.9	1998.5	1993.2
22.5°	2130.9	2054.9	1953.9	1904.1	1879.1	1804.4	1746.7	1706.1	1678.5	1651.0	1639.2
25°	1946.0	1822.8	1679.8	1581.5	1567.1	1497.5	1391.3	1341.5	1282.5	1264.1	1295.6
27.5°	1707.4	1547.4	1386.1	1235.3	1207.7	1144.8	1091.0	1055.6	987.4	983.5	986.1
30°	1383.5	1222.2	1087.1	988.7	920.6	891.7	856.3	830.1	802.5	813.0	815.7
32.5°	1136.9	983.5	857.6	805.2	773.7	755.3	725.2	708.1	696.3	692.4	691.1
35°	903.5	801.2	744.8	693.7	675.3	662.2	639.9	632.1	621.6	622.9	622.9
37.5°	773.7	688.5	646.5	620.3	603.2	596.7	582.2	574.4	567.8	565.2	569.1
40°	667.5	608.5	582.2	558.6	544.2	541.6	533.7	524.5	516.7	518.0	521.9
42.5°	590.1	556.0	524.5	506.2	495.7	491.8	485.2	478.6	478.6	474.7	473.4
45°	528.5	500.9	474.7	457.7	451.1	445.9	438.0	436.7	431.4	432.7	434.1
47.5°	473.4	451.1	431.4	414.4	407.8	406.5	398.6	393.4	393.4	392.1	390.8
50°	423.6	401.3	384.2	375.0	365.9	363.2	361.9	360.6	358.0	358.0	359.3
52.5°	382.9	360.6	347.5	339.6	334.4	331.8	331.8	330.5	330.5	330.5	329.1
55°	338.3	320.0	309.5	306.9	304.2	302.9	301.6	299.0	297.7	300.3	297.7
57.5°	296.4	289.8	280.6	278.0	271.4	271.4	267.5	264.9	262.3	264.9	264.9
60°	263.6	254.4	249.2	241.3	236.0	230.8	224.2	222.9	220.3	219.0	217.7
62.5°	229.5	221.6	208.5	196.7	188.8	183.6	181.0	179.7	179.7	178.3	178.3
65°	191.5	173.1	166.5	162.6	161.3	160.0	157.4	156.0	157.4	156.0	157.4
67.5°	149.5	146.9	142.9	140.3	139.0	137.7	137.7	136.4	136.4	136.4	136.4
70°	129.8	123.3	122.0	119.3	119.3	118.0	118.0	118.0	118.0	116.7	119.3
72.5°	107.5	103.6	102.3	101.0	101.0	101.0	99.7	99.7	99.7	98.4	99.7
75°	87.9	86.5	83.9	83.9	82.6	83.9	82.6	82.6	81.3	82.6	82.6
77.5°	70.8	69.5	68.2	68.2	66.9	66.9	66.9	66.9	66.9	66.9	68.2
80°	53.8	52.5	51.1	52.5	51.1	52.5	51.1	51.1	52.5	51.1	51.1
82.5°	39.3	38.0	38.0	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7
85°	23.6	22.3	22.3	23.6	22.3	23.6	22.3	22.3	22.3	23.6	23.6
87.5°	10.5	11.8	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	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: P997769

CATALOG NUMBER: SA2XXRDP-B865DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0
2.5°	1989.3	1980.1	1977.5	1980.1	1977.5	1978.8	1969.6	1935.5	1944.7	1930.3	1938.2
5°	2102.1	2094.2	2077.2	2074.5	2071.9	2069.3	2056.2	2026.0	2014.2	1994.5	1993.2
7.5°	2209.6	2209.6	2196.5	2187.3	2175.5	2166.3	2149.3	2104.7	2086.3	2062.7	2049.6
10°	2315.8	2281.7	2296.2	2287.0	2258.1	2252.9	2221.4	2195.2	2159.8	2136.2	2115.2
12.5°	2391.9	2381.4	2368.3	2360.4	2352.5	2335.5	2314.5	2247.6	2229.3	2182.1	2158.5
15°	2389.3	2382.7	2386.6	2386.6	2384.0	2380.1	2363.0	2314.5	2283.0	2237.1	2196.5
17.5°	2260.7	2277.8	2294.8	2306.6	2332.9	2344.7	2360.4	2331.6	2311.9	2272.6	2229.3
20°	2036.5	2078.5	2128.3	2138.8	2162.4	2231.9	2263.4	2288.3	2296.2	2283.0	2247.6
22.5°	1724.4	1759.8	1880.5	1877.8	1911.9	1994.5	2086.3	2161.1	2220.1	2252.9	2239.8
25°	1350.7	1400.5	1464.8	1513.3	1624.7	1748.0	1862.1	1981.4	2083.7	2174.2	2196.5
27.5°	1021.5	1087.1	1138.2	1202.5	1258.9	1404.4	1551.3	1737.5	1856.9	2028.6	2117.8
30°	826.1	856.3	907.4	937.6	965.1	1076.6	1243.1	1426.7	1636.6	1834.6	1988.0
32.5°	705.5	726.5	764.5	777.6	806.5	881.2	986.1	1154.0	1370.3	1610.3	1812.3
35°	633.4	655.7	663.5	675.3	698.9	746.2	818.3	940.2	1135.6	1370.3	1611.6
37.5°	571.7	583.5	605.8	613.7	621.6	657.0	705.5	790.7	920.6	1113.3	1380.8
40°	528.5	535.0	546.8	553.4	558.6	583.5	626.8	684.5	780.2	927.1	1173.6
42.5°	482.6	490.4	498.3	506.2	512.7	532.4	558.6	613.7	678.0	789.4	967.8
45°	438.0	443.2	452.4	457.7	466.8	482.6	506.2	544.2	601.9	672.7	817.0
47.5°	397.3	403.9	407.8	414.4	420.9	438.0	460.3	485.2	532.4	601.9	706.8
50°	360.6	368.5	373.7	375.0	380.3	396.0	414.4	441.9	472.1	525.8	617.6
52.5°	334.4	335.7	339.6	344.9	343.6	352.8	369.8	390.8	422.3	465.5	532.4
55°	304.2	308.2	310.8	312.1	312.1	320.0	329.1	348.8	373.7	409.1	465.5
57.5°	266.2	270.1	278.0	280.6	284.6	288.5	292.4	305.5	326.5	360.6	406.5
60°	226.9	229.5	237.4	242.6	245.2	255.7	261.0	271.4	283.2	308.2	351.4
62.5°	182.3	184.9	188.8	194.1	199.3	215.1	228.2	238.7	247.8	264.9	300.3
65°	158.7	160.0	162.6	163.9	165.2	171.8	183.6	198.0	215.1	228.2	249.2
67.5°	137.7	139.0	140.3	142.9	144.2	145.6	150.8	154.7	171.8	190.1	205.9
70°	118.0	120.6	122.0	122.0	123.3	125.9	128.5	133.8	139.0	148.2	167.9
72.5°	99.7	101.0	103.6	103.6	103.6	106.2	108.8	111.5	114.1	119.3	127.2
75°	82.6	85.2	85.2	85.2	86.5	86.5	89.2	91.8	94.4	98.4	101.0
77.5°	68.2	68.2	68.2	68.2	69.5	69.5	70.8	73.4	74.7	76.1	78.7
80°	51.1	52.5	52.5	52.5	53.8	53.8	53.8	56.4	57.7	57.7	60.3
82.5°	38.0	38.0	38.0	39.3	38.0	39.3	39.3	40.7	39.3	40.7	42.0
85°	23.6	23.6	23.6	24.9	24.9	24.9	24.9	24.9	24.9	24.9	26.2
87.5°	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	13.1	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: P997769

CATALOG NUMBER: SA2XXRDP-B865DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0
2.5°	1926.4	1919.8	1919.8	1915.9	1915.9	1894.9	1894.9	1901.4	1893.6	1884.4	1871.3
5°	1976.2	1961.8	1957.8	1952.6	1935.5	1909.3	1898.8	1894.9	1879.1	1859.5	1837.2
7.5°	2023.4	1999.8	1988.0	1976.2	1953.9	1917.2	1896.2	1881.8	1858.2	1828.0	1799.2
10°	2069.3	2039.1	2009.0	1994.5	1963.1	1917.2	1887.0	1863.4	1829.3	1788.7	1748.0
12.5°	2111.3	2048.3	2043.1	2014.2	1968.3	1915.9	1870.0	1835.9	1792.6	1745.4	1698.2
15°	2148.0	2083.7	2052.2	2026.0	1965.7	1900.1	1851.6	1809.6	1751.9	1698.2	1640.5
17.5°	2166.3	2096.8	2075.9	2032.6	1970.9	1885.7	1820.1	1769.0	1706.1	1641.8	1576.2
20°	2184.7	2103.4	2069.3	2039.1	1955.2	1858.2	1784.7	1725.7	1656.2	1580.2	1508.0
22.5°	2193.9	2103.4	2062.7	2020.8	1939.5	1828.0	1741.5	1672.0	1590.7	1513.3	1426.7
25°	2178.1	2095.5	2047.0	2003.7	1911.9	1791.3	1691.6	1612.9	1526.4	1438.5	1350.7
27.5°	2138.8	2077.2	2020.8	1976.2	1873.9	1744.1	1639.2	1550.0	1460.8	1362.5	1273.3
30°	2065.4	2037.8	1993.2	1943.4	1831.9	1702.1	1577.5	1485.7	1387.4	1289.0	1195.9
32.5°	1951.3	1974.9	1946.0	1902.8	1782.1	1644.4	1512.0	1418.9	1311.3	1205.1	1119.9
35°	1812.3	1896.2	1880.5	1850.3	1729.7	1582.8	1450.3	1337.6	1230.0	1122.5	1037.3
37.5°	1660.2	1787.4	1800.5	1782.1	1669.3	1519.8	1374.3	1264.1	1154.0	1045.1	958.6
40°	1451.7	1647.0	1689.0	1696.9	1606.4	1443.8	1291.7	1184.1	1075.3	969.1	864.2
42.5°	1260.2	1506.7	1559.2	1592.0	1526.4	1369.0	1215.6	1096.3	988.7	893.0	788.1
45°	1080.5	1337.6	1422.8	1464.8	1435.9	1283.8	1125.1	1013.7	915.3	827.5	726.5
47.5°	895.6	1154.0	1273.3	1340.2	1340.2	1197.3	1038.6	928.4	834.0	759.3	670.1
50°	772.4	987.4	1110.7	1198.6	1222.2	1109.4	959.9	852.4	763.2	681.9	613.7
52.5°	658.3	851.1	953.3	1045.1	1113.3	1015.0	872.0	775.0	687.1	611.1	557.3
55°	569.1	713.4	806.5	907.4	983.5	919.2	786.8	692.4	616.3	553.4	507.5
57.5°	483.9	609.8	685.8	775.0	856.3	807.8	701.6	620.3	553.4	498.3	457.7
60°	411.8	514.0	573.1	642.6	743.5	709.4	621.6	546.8	493.1	443.2	409.1
62.5°	350.1	431.4	481.3	531.1	622.9	607.2	539.0	481.3	435.4	393.4	364.6
65°	287.2	354.1	393.4	436.7	510.1	516.7	461.6	420.9	379.0	342.3	316.0
67.5°	232.1	284.6	320.0	356.7	415.7	434.1	396.0	361.9	326.5	296.4	272.8
70°	187.5	224.2	250.5	279.3	327.8	350.1	330.5	306.9	278.0	253.1	232.1
72.5°	148.2	171.8	187.5	209.8	249.2	271.4	270.1	249.2	228.2	211.1	194.1
75°	108.8	127.2	140.3	154.7	186.2	207.2	212.4	203.3	182.3	169.2	156.0
77.5°	82.6	93.1	99.7	110.2	132.4	150.8	158.7	156.0	141.6	131.1	122.0
80°	62.9	65.6	68.2	72.1	90.5	107.5	112.8	111.5	103.6	99.7	89.2
82.5°	44.6	45.9	47.2	48.5	55.1	69.5	74.7	77.4	70.8	66.9	57.7
85°	26.2	27.5	27.5	30.2	31.5	35.4	44.6	44.6	43.3	38.0	36.7
87.5°	13.1	13.1	11.8	11.8	13.1	14.4	17.0	19.7	17.0	15.7	14.4
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: P997769

CATALOG NUMBER: SA2XXRDP-B865DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0
2.5°	1866.0	1867.3	1871.3	1859.5	1841.1	1833.3	1809.6	1805.7	1801.8	1801.8	1805.7
5°	1824.1	1818.8	1820.1	1797.8	1771.6	1755.9	1723.1	1728.3	1711.3	1700.8	1703.4
7.5°	1778.2	1763.8	1762.4	1733.6	1700.8	1672.0	1637.9	1630.0	1614.3	1595.9	1588.0
10°	1720.5	1710.0	1690.3	1657.5	1615.6	1592.0	1546.1	1518.5	1514.6	1487.1	1476.6
12.5°	1661.5	1643.1	1623.4	1577.5	1530.3	1492.3	1458.2	1428.0	1407.1	1383.5	1367.7
15°	1593.3	1571.0	1548.7	1500.2	1445.1	1407.1	1355.9	1311.3	1249.7	1201.2	1173.6
17.5°	1518.5	1493.6	1463.5	1409.7	1355.9	1303.5	1209.1	1156.6	1113.3	1084.5	1067.4
20°	1441.2	1413.6	1383.5	1329.7	1236.6	1144.8	1092.3	1051.7	1025.5	996.6	975.6
22.5°	1359.9	1331.0	1298.2	1214.3	1115.9	1051.7	1011.0	973.0	935.0	919.2	908.8
25°	1283.8	1257.6	1215.6	1101.5	1024.2	965.1	919.2	894.3	874.7	853.7	834.0
27.5°	1205.1	1156.6	1097.6	1001.9	953.3	893.0	860.2	841.9	807.8	793.4	784.2
30°	1110.7	1056.9	1000.6	932.4	876.0	834.0	803.9	773.7	754.0	739.6	723.9
32.5°	1015.0	963.8	928.4	857.6	815.7	772.4	743.5	725.2	696.3	687.1	680.6
35°	932.4	889.1	857.6	799.9	760.6	721.2	700.3	672.7	654.4	637.3	626.8
37.5°	851.1	827.5	794.7	746.2	704.2	672.7	643.9	634.7	609.8	600.6	590.1
40°	794.7	759.3	731.7	689.8	654.4	620.3	601.9	580.9	563.9	549.5	545.5
42.5°	726.5	700.3	684.5	638.6	601.9	582.2	559.9	536.3	523.2	511.4	497.0
45°	675.3	651.7	629.4	592.7	559.9	535.0	515.4	499.6	477.3	472.1	449.8
47.5°	621.6	598.0	580.9	544.2	514.0	490.4	476.0	455.0	436.7	424.9	414.4
50°	567.8	548.1	532.4	500.9	474.7	449.8	430.1	409.1	401.3	381.6	375.0
52.5°	516.7	503.6	486.5	456.3	430.1	409.1	388.2	371.1	359.3	348.8	340.9
55°	473.4	452.4	444.5	411.8	389.5	367.2	348.8	338.3	323.9	317.3	310.8
57.5°	424.9	413.1	400.0	375.0	350.1	329.1	316.0	300.3	292.4	284.6	279.3
60°	382.9	365.9	355.4	334.4	312.1	292.4	280.6	268.8	258.3	251.8	241.3
62.5°	334.4	321.3	314.7	292.4	274.1	255.7	245.2	233.4	225.6	213.7	200.6
65°	292.4	281.9	274.1	255.7	238.7	221.6	211.1	196.7	186.2	179.7	178.3
67.5°	255.7	247.8	236.0	219.0	201.9	188.8	177.0	165.2	163.9	161.3	161.3
70°	215.1	207.2	200.6	182.3	167.9	153.4	150.8	146.9	142.9	141.6	139.0
72.5°	179.7	173.1	165.2	149.5	135.1	131.1	128.5	125.9	122.0	120.6	119.3
75°	145.6	136.4	131.1	116.7	112.8	110.2	107.5	103.6	101.0	99.7	97.0
77.5°	111.5	102.3	102.3	94.4	91.8	87.9	85.2	82.6	81.3	78.7	78.7
80°	78.7	78.7	76.1	72.1	68.2	66.9	62.9	61.6	60.3	61.6	59.0
82.5°	57.7	52.5	52.5	49.8	47.2	45.9	43.3	43.3	42.0	42.0	42.0
85°	32.8	32.8	31.5	28.8	27.5	27.5	26.2	26.2	24.9	24.9	23.6
87.5°	13.1	11.8	13.1	11.8	11.8	10.5	10.5	10.5	9.2	10.5	9.2
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: P997769

CATALOG NUMBER: SA2XXRDP-B865DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0
2.5°	1805.7	1803.1	1795.2	1797.8	1793.9	1793.9	1791.3	1791.3	1791.3	1797.8	1793.9
5°	1707.4	1698.2	1689.0	1685.1	1681.1	1677.2	1677.2	1675.9	1687.7	1685.1	1695.6
7.5°	1585.4	1582.8	1564.4	1564.4	1557.9	1555.2	1561.8	1563.1	1564.4	1567.1	1573.6
10°	1476.6	1470.0	1443.8	1446.4	1442.5	1437.2	1441.2	1438.5	1447.7	1450.3	1447.7
12.5°	1348.1	1336.3	1307.4	1293.0	1277.2	1265.4	1279.9	1269.4	1306.1	1316.6	1345.4
15°	1177.6	1155.3	1135.6	1135.6	1121.2	1110.7	1117.3	1129.1	1136.9	1148.7	1154.0
17.5°	1063.5	1054.3	1038.6	1029.4	1025.5	1021.5	1021.5	1026.8	1043.8	1042.5	1053.0
20°	966.5	961.2	953.3	941.5	937.6	935.0	935.0	935.0	946.8	957.3	963.8
22.5°	899.6	895.6	890.4	874.7	866.8	864.2	870.7	874.7	883.8	891.7	898.3
25°	832.7	823.5	814.3	809.1	805.2	805.2	807.8	809.1	813.0	817.0	824.8
27.5°	777.6	771.1	758.0	743.5	743.5	739.6	742.2	744.8	754.0	767.1	773.7
30°	716.0	714.7	709.4	704.2	698.9	696.3	701.6	705.5	706.8	713.4	713.4
32.5°	671.4	662.2	653.0	647.8	645.2	643.9	645.2	650.4	650.4	658.3	667.5
35°	626.8	621.6	612.4	603.2	600.6	594.0	599.3	604.5	613.7	617.6	621.6
37.5°	578.3	571.7	567.8	565.2	559.9	561.3	557.3	565.2	573.1	571.7	574.4
40°	541.6	529.8	518.0	516.7	515.4	514.0	514.0	515.4	520.6	525.8	533.7
42.5°	494.4	490.4	480.0	469.5	466.8	464.2	461.6	466.8	477.3	486.5	490.4
45°	445.9	440.6	438.0	430.1	424.9	423.6	420.9	427.5	436.7	440.6	443.2
47.5°	401.3	400.0	392.1	393.4	389.5	390.8	389.5	393.4	393.4	397.3	400.0
50°	371.1	367.2	363.2	360.6	356.7	356.7	355.4	356.7	361.9	367.2	365.9
52.5°	340.9	334.4	333.1	331.8	329.1	331.8	327.8	329.1	334.4	337.0	335.7
55°	305.5	304.2	301.6	299.0	297.7	296.4	296.4	296.4	301.6	305.5	306.9
57.5°	278.0	271.4	266.2	266.2	261.0	259.6	262.3	263.6	267.5	270.1	272.8
60°	240.0	237.4	229.5	225.6	217.7	216.4	216.4	221.6	228.2	237.4	240.0
62.5°	199.3	195.4	194.1	194.1	194.1	194.1	194.1	194.1	194.1	195.4	195.4
65°	177.0	178.3	177.0	175.7	177.0	177.0	175.7	175.7	175.7	177.0	178.3
67.5°	158.7	157.4	158.7	157.4	156.0	156.0	154.7	156.0	157.4	158.7	158.7
70°	137.7	137.7	136.4	137.7	136.4	135.1	133.8	133.8	136.4	137.7	137.7
72.5°	118.0	118.0	116.7	116.7	114.1	114.1	115.4	114.1	114.1	118.0	118.0
75°	98.4	97.0	95.7	95.7	94.4	94.4	94.4	93.1	95.7	95.7	97.0
77.5°	77.4	77.4	77.4	76.1	76.1	74.7	74.7	76.1	76.1	76.1	77.4
80°	59.0	59.0	59.0	57.7	56.4	56.4	56.4	56.4	56.4	57.7	56.4
82.5°	40.7	40.7	40.7	40.7	40.7	39.3	39.3	39.3	40.7	40.7	39.3
85°	24.9	23.6	24.9	24.9	23.6	24.9	23.6	23.6	22.3	22.3	23.6
87.5°	10.5	9.2	7.9	7.9	9.2	7.9	7.9	7.9	9.2	7.9	7.9
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: P997769

CATALOG NUMBER: SA2XXRDP-B865DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0	1887.0
2.5°	1797.8	1804.4	1801.8	1787.4	1801.8	1805.7	1813.6	1821.5	1826.7	1834.6	1841.1
5°	1685.1	1698.2	1706.1	1698.2	1724.4	1728.3	1746.7	1757.2	1772.9	1786.0	1796.5
7.5°	1578.9	1589.3	1605.1	1607.7	1623.4	1641.8	1668.0	1694.3	1719.2	1732.3	1744.1
10°	1464.8	1483.1	1506.7	1501.5	1525.1	1553.9	1581.5	1623.4	1644.4	1668.0	1689.0
12.5°	1350.7	1362.5	1394.0	1404.4	1438.5	1460.8	1498.9	1525.1	1577.5	1605.1	1623.4
15°	1151.4	1199.9	1239.2	1286.4	1331.0	1373.0	1407.1	1454.3	1500.2	1521.2	1551.3
17.5°	1060.9	1083.2	1106.8	1130.4	1188.1	1262.8	1323.1	1374.3	1413.6	1441.2	1476.6
20°	966.5	988.7	1015.0	1037.3	1072.7	1126.4	1201.2	1289.0	1336.3	1365.1	1399.2
22.5°	899.6	920.6	937.6	957.3	984.8	1024.2	1080.5	1189.4	1252.3	1287.7	1317.9
25°	827.5	853.7	872.0	886.5	908.8	952.0	997.9	1059.6	1172.3	1199.9	1241.8
27.5°	777.6	785.5	806.5	828.8	851.1	874.7	921.9	974.3	1050.4	1110.7	1161.8
30°	718.6	738.3	758.0	767.1	786.8	820.9	849.7	906.1	965.1	1012.4	1074.0
32.5°	674.0	685.8	698.9	721.2	739.6	763.2	792.0	839.3	889.1	919.2	966.5
35°	624.2	632.1	659.6	668.8	687.1	710.7	739.6	776.3	830.1	853.7	887.8
37.5°	577.0	595.3	603.2	624.2	641.2	664.8	685.8	727.8	763.2	790.7	822.2
40°	540.3	548.1	562.6	580.9	595.3	613.7	639.9	670.1	708.1	730.4	758.0
42.5°	495.7	502.2	520.6	531.1	554.7	571.7	587.5	624.2	658.3	675.3	702.9
45°	447.2	462.9	474.7	495.7	508.8	529.8	549.5	575.7	607.2	626.8	642.6
47.5°	405.2	420.9	432.7	452.4	473.4	482.6	503.6	531.1	559.9	575.7	598.0
50°	371.1	376.4	398.6	407.8	430.1	448.5	462.9	486.5	518.0	527.2	545.5
52.5°	338.3	342.3	356.7	368.5	388.2	403.9	422.3	444.5	470.8	485.2	499.6
55°	309.5	312.1	318.7	331.8	344.9	364.6	381.6	402.6	424.9	440.6	453.7
57.5°	276.7	281.9	287.2	295.1	308.2	326.5	344.9	364.6	382.9	393.4	410.4
60°	238.7	246.5	255.7	264.9	274.1	287.2	308.2	326.5	343.6	352.8	365.9
62.5°	198.0	213.7	221.6	232.1	240.0	251.8	267.5	288.5	300.3	312.1	322.6
65°	178.3	179.7	181.0	191.5	205.9	217.7	232.1	247.8	266.2	274.1	281.9
67.5°	158.7	160.0	162.6	163.9	169.2	182.3	198.0	215.1	229.5	234.7	242.6
70°	139.0	139.0	144.2	145.6	146.9	148.2	161.3	178.3	191.5	198.0	207.2
72.5°	118.0	119.3	122.0	123.3	125.9	128.5	132.4	141.6	157.4	163.9	174.4
75°	97.0	98.4	99.7	101.0	104.9	106.2	110.2	115.4	122.0	129.8	136.4
77.5°	77.4	77.4	78.7	81.3	83.9	85.2	89.2	91.8	94.4	98.4	103.6
80°	57.7	59.0	59.0	61.6	61.6	62.9	64.3	68.2	70.8	73.4	76.1
82.5°	39.3	42.0	42.0	42.0	43.3	44.6	45.9	45.9	48.5	49.8	53.8
85°	23.6	24.9	24.9	24.9	23.6	26.2	26.2	27.5	27.5	27.5	28.8
87.5°	9.2	7.9	9.2	9.2	9.2	10.5	9.2	9.2	10.5	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: P997769

CATALOG NUMBER: SA2XXRDP-B865DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	1887.0	1887.0	1887.0	1887.0
2.5°	1852.9	1849.0	1872.6	1898.8
5°	1814.9	1821.5	1851.6	1888.3
7.5°	1775.6	1790.0	1825.4	1873.9
10°	1720.5	1746.7	1800.5	1850.3
12.5°	1666.7	1702.1	1753.3	1812.3
15°	1606.4	1645.7	1708.7	1779.5
17.5°	1539.5	1584.1	1657.5	1734.9
20°	1468.7	1527.7	1605.1	1689.0
22.5°	1390.0	1460.8	1540.8	1633.9
25°	1314.0	1391.3	1471.3	1578.9
27.5°	1239.2	1315.3	1404.4	1513.3
30°	1164.5	1234.0	1329.7	1446.4
32.5°	1084.5	1156.6	1257.6	1376.9
35°	1011.0	1083.2	1177.6	1295.6
37.5°	932.4	1009.7	1100.2	1222.2
40°	840.6	931.1	1018.9	1135.6
42.5°	764.5	860.2	945.5	1055.6
45°	704.2	794.7	865.5	973.0
47.5°	647.8	721.2	793.4	893.0
50°	594.0	650.4	725.2	814.3
52.5°	539.0	587.5	651.7	735.7
55°	489.1	535.0	592.7	657.0
57.5°	443.2	476.0	533.7	591.4
60°	392.1	426.2	470.8	519.3
62.5°	348.8	375.0	417.0	457.7
65°	302.9	327.8	359.3	397.3
67.5°	261.0	283.2	308.2	338.3
70°	222.9	240.0	258.3	284.6
72.5°	182.3	200.6	217.7	238.7
75°	149.5	157.4	171.8	186.2
77.5°	115.4	125.9	133.8	145.6
80°	82.6	91.8	94.4	103.6
82.5°	55.1	60.3	65.6	68.2
85°	31.5	34.1	39.3	40.7
87.5°	11.8	13.1	15.7	18.4
90°	0.0	0.0	0.0	0.0

TEST NUMBER: P997769

CATALOG NUMBER: SA2XXRDP-B865DB2750-4F0-XX-W2A-A_4000K

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	22.84	24.29	23.20	24.60	24.92	17.25	18.70	17.62	19.02	19.33
	3H	24.17	25.47	24.55	25.79	26.16	18.38	19.68	18.76	20.01	20.37
	4H	24.59	25.81	24.99	26.16	26.54	18.84	20.06	19.24	20.41	20.79
	6H	24.87	25.99	25.28	26.36	26.75	19.22	20.34	19.63	20.71	21.10
	8H	24.94	26.01	25.37	26.40	26.80	19.34	20.41	19.77	20.80	21.20
	12H	24.98	26.00	25.41	26.38	26.81	19.42	20.44	19.86	20.83	21.26
4H	2H	22.81	24.03	23.22	24.38	24.76	17.94	19.15	18.34	19.50	19.88
	3H	24.26	25.27	24.67	25.67	26.07	19.23	20.23	19.64	20.63	21.04
	4H	24.76	25.67	25.20	26.08	26.52	19.78	20.69	20.22	21.11	21.55
	6H	25.14	25.92	25.60	26.37	26.83	20.27	21.05	20.73	21.49	21.96
	8H	25.25	25.98	25.72	26.43	26.90	20.43	21.16	20.89	21.61	22.08
	12H	25.33	25.98	25.81	26.46	26.93	20.55	21.20	21.03	21.68	22.15
8H	4H	24.75	25.48	25.22	25.93	26.40	20.10	20.84	20.57	21.28	21.75
	6H	25.17	25.77	25.67	26.27	26.74	20.69	21.29	21.19	21.78	22.26
	8H	25.31	25.86	25.83	26.37	26.86	20.92	21.46	21.43	21.97	22.46
	12H	25.43	25.91	25.94	26.40	26.97	21.11	21.58	21.62	22.08	22.64
12H	4H	24.73	25.38	25.21	25.86	26.33	20.14	20.79	20.62	21.27	21.74
	6H	25.14	25.69	25.66	26.20	26.69	20.75	21.29	21.26	21.80	22.29
	8H	25.32	25.80	25.83	26.29	26.86	21.03	21.51	21.54	22.00	22.57