

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: P997780

Luminaire Tested: SA2XXRDP-B865DB40-4F0-XX-W2A-A

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997780
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-B865DB40-4F0-XX-W2A-A
Description: Define 2 Regressed Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

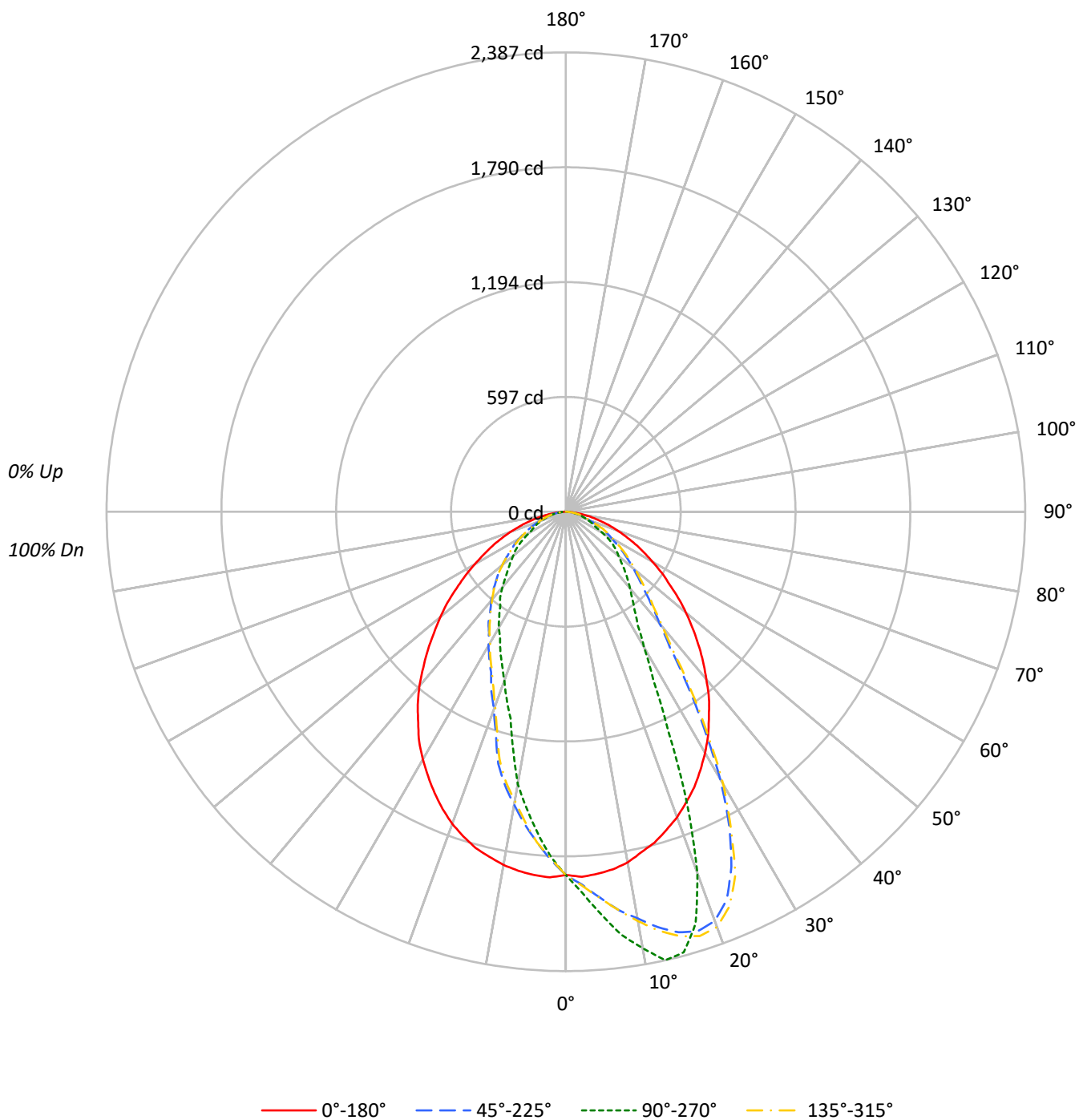
Lumens per Lamp: N/A
Luminaire Lumens: 3261.0 lumens
Efficiency: N/A
Efficacy: 69.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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

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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°	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

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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	

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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

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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

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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: P997780

CATALOG NUMBER: SA2XXRDP-B865DB40-4F0-XX-W2A-A

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: P997780

CATALOG NUMBER: SA2XXRDP-B865DB40-4F0-XX-W2A-A

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: P997780

CATALOG NUMBER: SA2XXRDP-B865DB40-4F0-XX-W2A-A

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: P997780

CATALOG NUMBER: SA2XXRDP-B865DB40-4F0-XX-W2A-A

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

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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: P997780

CATALOG NUMBER: SA2XXRDP-B865DB40-4F0-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	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