

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: P997538

Luminaire Tested: SA2XXDP-B1005DB2750-4F0-XX-W2A-A_3000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997538
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-B1005DB2750-4F0-XX-W2A-A_3000K
Description: Define 2 Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

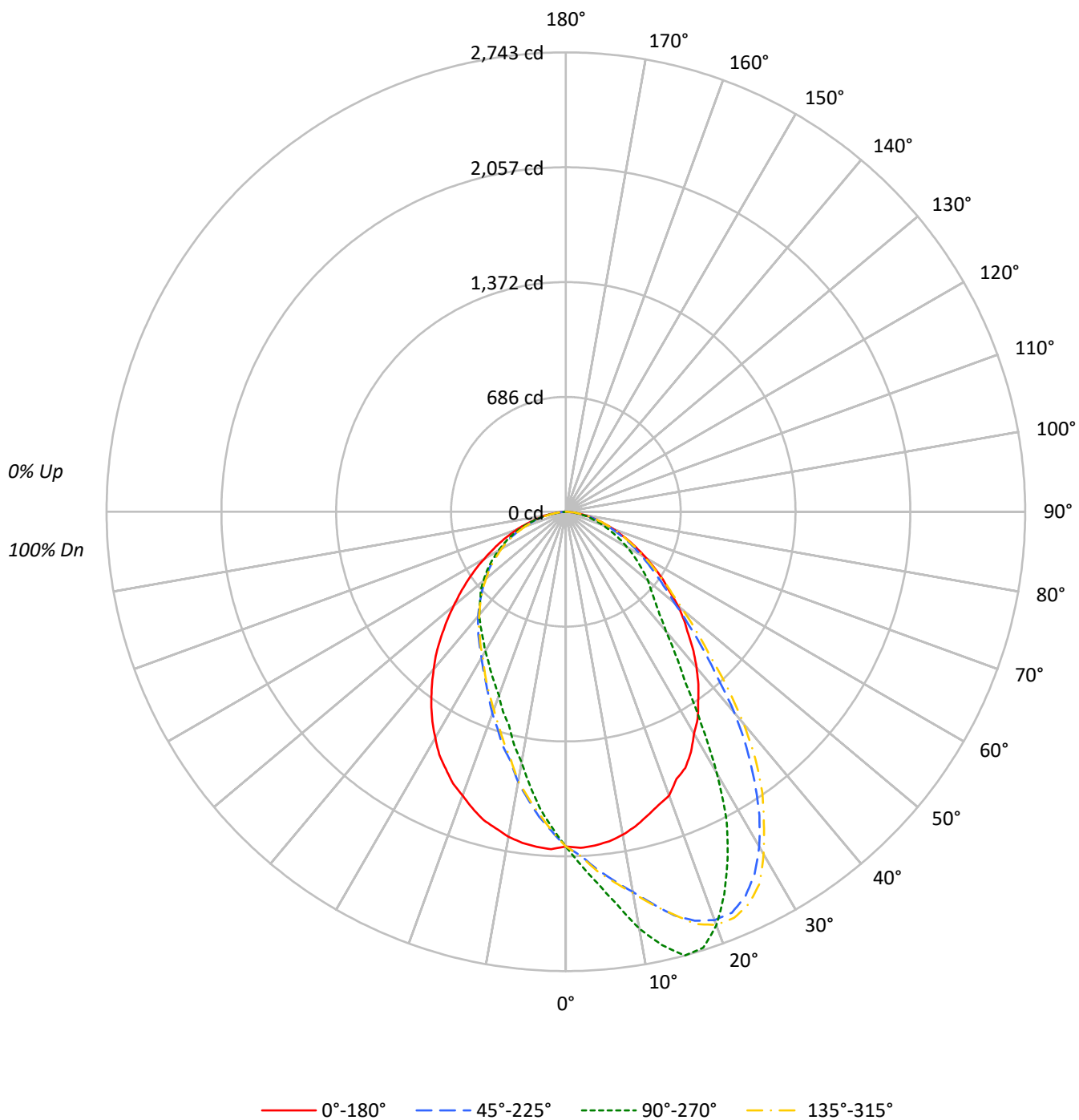
Lumens per Lamp: N/A
Luminaire Lumens: 4409.0 lumens
Efficiency: N/A
Efficacy: 71.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.09 / 1.23
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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				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	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	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°	31633	31633	31633	31633
5°	31778	35463	31900	28214
10°	31478	40639	31676	24417
15°	30786	44956	31214	21573
20°	30377	44271	30377	19665
25°	29484	39920	29618	18458
30°	27964	32988	28497	17574
35°	26625	24043	27071	16949
40°	25075	19203	25361	16599
45°	23140	16781	23519	16127
50°	21486	15773	21523	15812
55°	19583	14541	19713	15388
60°	17555	13325	17798	14734
65°	15765	12139	16053	14094
70°	14005	11020	14361	13153
75°	12024	9767	12495	11651
80°	9799	8405	10501	9380
85°	7247	7537	7810	5576

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 155°

Vertical Angle: 45°

Luminance: 41298 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.3	4.3
10°-20°	554.0	12.6
20°-30°	804.0	18.2
30°-40°	847.6	19.2
40°-50°	750.0	17.0
50°-60°	598.9	13.6
60°-70°	406.8	9.2
70°-80°	208.1	4.7
80°-90°	49.2	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°	1548.4	35.1
0°-40°	2396.0	54.3
0°-60°	3744.9	84.9
0°-90°	4409.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4409.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1998	1998	1998	1998	1998	
5°	2000	2232	2008	1776	2000	190
15°	1879	2743	1905	1316	1879	531
25°	1688	2286	1696	1057	1688	772
35°	1378	1244	1401	877	1378	862
45°	1034	750	1051	720	1034	802
55°	710	527	714	558	710	633
65°	421	324	429	376	421	418
75°	197	160	204	190	197	211
85°	40	42	43	31	40	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°	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4
2.5°	2009.1	2013.7	2021.4	2022.9	2038.3	2050.6	2064.4	2064.4	2069.0	2067.5	2055.2
5°	1999.9	2013.7	2033.7	2050.6	2078.2	2090.5	2109.0	2122.8	2135.1	2144.3	2142.8
7.5°	1984.5	2009.1	2038.3	2070.6	2107.4	2128.9	2155.0	2179.6	2196.5	2211.9	2222.6
10°	1958.4	1999.9	2039.8	2082.8	2130.5	2159.6	2190.4	2222.6	2248.7	2277.9	2305.6
12.5°	1923.1	1983.0	2032.2	2089.0	2147.4	2179.6	2228.8	2253.3	2304.0	2377.8	2397.7
15°	1878.6	1960.0	2006.0	2078.2	2155.0	2181.2	2248.7	2288.7	2393.1	2439.2	2494.5
17.5°	1837.1	1927.7	1989.1	2072.1	2147.4	2198.0	2264.1	2345.5	2433.1	2499.1	2560.5
20°	1803.3	1890.8	1964.6	2056.7	2152.0	2216.5	2285.6	2383.9	2479.1	2546.7	2594.3
22.5°	1726.5	1838.6	1924.6	2027.5	2142.8	2231.8	2297.9	2405.4	2508.3	2549.8	2591.3
25°	1688.1	1784.9	1884.7	2001.4	2136.6	2242.6	2299.4	2419.2	2509.9	2525.2	2534.4
27.5°	1617.4	1726.5	1843.2	1976.9	2135.1	2224.2	2296.4	2405.4	2477.6	2466.9	2439.2
30°	1529.9	1663.5	1792.5	1936.9	2113.6	2210.3	2277.9	2377.8	2414.6	2359.3	2310.2
32.5°	1465.4	1591.3	1734.2	1901.6	2089.0	2181.2	2247.2	2325.5	2333.2	2233.4	2150.4
35°	1377.8	1517.6	1678.9	1855.5	2047.5	2130.5	2191.9	2239.5	2202.7	2062.9	1964.6
37.5°	1299.5	1437.7	1609.8	1789.5	1990.7	2072.1	2121.2	2128.9	2038.3	1915.4	1771.0
40°	1213.5	1356.3	1536.0	1725.0	1927.7	1998.4	2029.1	2006.0	1875.5	1732.6	1565.2
42.5°	1127.4	1268.8	1462.3	1655.8	1847.8	1907.7	1920.0	1857.1	1697.3	1529.9	1336.3
45°	1033.7	1181.2	1374.7	1569.8	1755.7	1789.5	1791.0	1700.4	1511.4	1336.3	1156.6
47.5°	956.9	1093.6	1285.7	1480.7	1637.4	1660.4	1651.2	1546.8	1340.9	1144.3	987.7
50°	872.5	1003.0	1193.5	1385.5	1519.1	1525.3	1502.2	1353.2	1152.0	972.3	847.9
52.5°	781.8	913.9	1089.0	1273.4	1393.2	1384.0	1339.4	1179.7	990.7	841.7	746.5
55°	709.6	826.4	990.7	1170.4	1254.9	1228.8	1179.7	1016.8	867.9	741.9	659.0
57.5°	629.8	732.7	894.0	1050.6	1099.8	1075.2	1026.1	874.0	735.8	640.5	585.2
60°	554.5	648.2	789.5	920.1	958.5	932.4	875.5	738.8	639.0	559.1	517.6
62.5°	485.4	566.8	685.1	804.9	820.2	794.1	745.0	634.4	548.4	485.4	454.7
65°	420.9	497.7	592.9	683.5	697.4	669.7	619.0	539.1	467.0	427.0	397.8
67.5°	357.9	419.3	503.8	569.9	577.5	551.4	510.0	445.4	400.9	357.9	336.4
70°	302.6	348.7	414.7	468.5	471.6	447.0	425.5	367.1	333.3	302.6	285.7
72.5°	248.8	281.1	331.8	371.7	373.3	357.9	337.9	301.1	271.9	250.4	233.5
75°	196.6	224.3	255.0	290.3	288.8	276.5	261.1	238.1	213.5	199.7	192.0
77.5°	150.5	167.4	192.0	215.0	215.0	208.9	199.7	182.8	167.4	153.6	145.9
80°	107.5	118.3	138.2	145.9	149.0	147.5	139.8	127.5	121.3	110.6	107.5
82.5°	69.1	76.8	86.0	93.7	98.3	95.2	93.7	87.6	78.3	75.3	72.2
85°	39.9	43.0	47.6	52.2	53.8	52.2	55.3	50.7	46.1	46.1	44.5
87.5°	16.9	18.4	21.5	21.5	23.0	23.0	21.5	23.0	23.0	21.5	20.0
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°	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4
2.5°	2076.7	2078.2	2081.3	2096.7	2104.3	2105.9	2099.7	2113.6	2118.2	2113.6	2110.5
5°	2175.0	2184.2	2202.7	2222.6	2221.1	2222.6	2231.8	2241.1	2244.1	2231.8	2236.4
7.5°	2261.0	2279.5	2299.4	2330.1	2330.1	2345.5	2351.6	2359.3	2377.8	2368.5	2365.5
10°	2359.3	2383.9	2420.8	2469.9	2471.5	2486.8	2502.2	2526.8	2534.4	2528.3	2531.4
12.5°	2482.2	2529.8	2532.9	2586.7	2611.2	2614.3	2638.9	2634.3	2649.6	2649.6	2675.7
15°	2536.0	2609.7	2651.2	2703.4	2718.8	2700.3	2720.3	2741.8	2743.3	2743.3	2741.8
17.5°	2632.7	2661.9	2703.4	2731.0	2737.2	2737.2	2738.7	2747.9	2741.8	2729.5	2738.7
20°	2652.7	2665.0	2680.4	2677.3	2680.4	2665.0	2649.6	2634.3	2635.8	2628.1	2651.2
22.5°	2615.8	2612.8	2577.4	2554.4	2554.4	2523.7	2494.5	2480.7	2466.9	2471.5	2479.1
25°	2523.7	2476.1	2433.1	2399.3	2391.6	2342.4	2302.5	2290.2	2267.2	2285.6	2288.7
27.5°	2376.2	2322.5	2253.3	2224.2	2184.2	2164.3	2136.6	2099.7	2052.1	2079.8	2075.2
30°	2218.0	2138.1	2081.3	2010.7	1947.7	1943.1	1890.8	1829.4	1804.8	1804.8	1818.6
32.5°	2041.4	1935.4	1852.4	1752.6	1691.2	1665.0	1602.1	1540.6	1554.5	1508.4	1525.3
35°	1835.5	1695.8	1591.3	1494.5	1448.5	1417.7	1336.3	1302.5	1265.7	1244.2	1284.1
37.5°	1638.9	1477.7	1344.0	1238.0	1221.1	1165.8	1110.5	1089.0	1067.5	1076.8	1075.2
40°	1399.3	1256.5	1136.7	1053.7	1024.5	998.4	961.5	935.4	921.6	929.3	930.8
42.5°	1182.7	1062.9	973.8	915.5	890.9	872.5	854.0	832.5	827.9	827.9	834.1
45°	1015.3	917.0	857.1	809.5	795.7	781.8	768.0	758.8	755.7	749.6	754.2
47.5°	881.7	803.3	766.5	731.1	715.8	712.7	700.4	695.8	689.7	688.1	689.7
50°	769.5	720.4	686.6	666.6	655.9	651.3	645.1	635.9	632.8	640.5	637.4
52.5°	691.2	645.1	626.7	606.7	600.6	594.4	585.2	586.8	585.2	582.2	582.2
55°	612.9	583.7	565.3	549.9	548.4	542.2	534.5	531.5	529.9	526.9	531.5
57.5°	549.9	526.9	510.0	496.1	490.0	490.0	482.3	476.2	476.2	474.6	476.2
60°	486.9	463.9	453.1	439.3	434.7	433.2	428.6	425.5	420.9	420.9	420.9
62.5°	428.6	410.1	397.8	385.5	387.1	379.4	373.3	370.2	370.2	371.7	371.7
65°	373.3	361.0	345.6	334.9	331.8	330.2	327.2	325.6	321.0	324.1	324.1
67.5°	322.6	305.7	296.5	291.8	287.2	285.7	282.6	279.6	278.0	276.5	279.6
70°	271.9	258.1	250.4	247.3	242.7	241.2	239.6	235.0	236.5	238.1	239.6
72.5°	225.8	213.5	212.0	202.8	202.8	202.8	196.6	199.7	198.1	195.1	198.1
75°	178.2	172.0	169.0	164.4	165.9	164.4	162.8	158.2	158.2	159.7	161.3
77.5°	141.3	135.2	133.6	129.0	126.0	129.0	126.0	124.4	124.4	126.0	126.0
80°	104.4	101.4	96.8	96.8	96.8	95.2	95.2	95.2	93.7	92.2	93.7
82.5°	69.1	69.1	67.6	66.0	67.6	64.5	66.0	66.0	66.0	66.0	66.0
85°	44.5	43.0	43.0	41.5	41.5	41.5	43.0	39.9	39.9	41.5	41.5
87.5°	20.0	20.0	20.0	21.5	20.0	20.0	20.0	21.5	20.0	20.0	20.0
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°	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4
2.5°	2118.2	2107.4	2098.2	2099.7	2107.4	2101.3	2085.9	2065.9	2058.3	2049.1	2058.3
5°	2245.7	2236.4	2218.0	2219.6	2214.9	2208.8	2184.2	2153.5	2153.5	2128.9	2125.9
7.5°	2371.6	2357.8	2345.5	2342.4	2325.5	2313.2	2291.7	2248.7	2231.8	2202.7	2185.8
10°	2512.9	2502.2	2488.4	2471.5	2462.2	2440.7	2405.4	2342.4	2311.7	2271.8	2242.6
12.5°	2655.8	2654.2	2623.5	2589.7	2588.2	2554.4	2529.8	2445.3	2403.9	2350.1	2281.0
15°	2746.4	2738.7	2721.8	2704.9	2709.5	2672.7	2617.4	2517.5	2489.9	2425.4	2351.6
17.5°	2744.9	2744.9	2740.3	2737.2	2732.6	2721.8	2691.1	2625.1	2580.5	2499.1	2430.0
20°	2657.3	2677.3	2681.9	2680.4	2695.7	2703.4	2701.9	2660.4	2625.1	2552.9	2482.2
22.5°	2482.2	2528.3	2548.3	2560.5	2592.8	2609.7	2649.6	2634.3	2625.1	2571.3	2511.4
25°	2319.4	2334.8	2394.7	2397.7	2442.3	2483.7	2523.7	2549.8	2583.6	2563.6	2512.9
27.5°	2109.0	2144.3	2187.3	2219.6	2228.8	2313.2	2379.3	2428.5	2505.3	2511.4	2494.5
30°	1870.9	1887.8	1958.4	2001.4	2050.6	2112.0	2207.3	2291.7	2360.9	2423.8	2445.3
32.5°	1580.6	1649.7	1691.2	1743.4	1786.4	1895.5	2012.2	2121.2	2201.1	2307.1	2353.2
35°	1314.8	1368.6	1439.3	1460.8	1539.1	1631.3	1783.3	1923.1	2044.4	2152.0	2245.7
37.5°	1095.2	1138.2	1213.5	1247.2	1293.3	1411.6	1539.1	1712.7	1858.6	1990.7	2107.4
40°	944.7	976.9	1033.7	1044.5	1082.9	1190.4	1293.3	1456.1	1649.7	1827.9	1955.4
42.5°	841.7	857.1	895.5	909.3	933.9	1006.1	1098.3	1251.9	1431.6	1615.9	1795.6
45°	768.0	778.8	801.8	814.1	844.8	877.1	952.3	1075.2	1216.5	1402.4	1595.9
47.5°	702.0	715.8	725.0	732.7	749.6	784.9	834.1	924.7	1059.9	1230.4	1417.7
50°	646.7	651.3	668.2	669.7	680.5	703.5	749.6	804.9	912.4	1050.6	1231.9
52.5°	591.4	596.0	606.7	617.5	622.1	640.5	671.2	717.3	797.2	906.3	1067.5
55°	536.1	542.2	553.0	560.6	565.3	580.6	599.0	643.6	706.6	783.4	915.5
57.5°	480.8	494.6	497.7	502.3	510.0	526.9	543.8	569.9	619.0	689.7	786.4
60°	428.6	433.2	443.9	448.5	456.2	465.4	486.9	506.9	542.2	597.5	685.1
62.5°	374.8	385.5	390.1	394.8	400.9	411.7	425.5	447.0	477.7	522.2	591.4
65°	328.7	330.2	339.5	345.6	351.7	359.4	373.3	393.2	411.7	453.1	503.8
67.5°	284.2	287.2	290.3	296.5	304.1	311.8	324.1	334.9	357.9	385.5	425.5
70°	241.2	241.2	248.8	253.4	251.9	261.1	270.3	282.6	299.5	325.6	357.9
72.5°	202.8	201.2	207.4	208.9	212.0	218.1	224.3	236.5	245.8	265.7	290.3
75°	161.3	164.4	167.4	167.4	172.0	176.6	182.8	188.9	199.7	212.0	230.4
77.5°	127.5	127.5	130.6	132.1	136.7	135.2	141.3	147.5	155.1	165.9	179.7
80°	93.7	96.8	96.8	96.8	98.3	99.8	106.0	110.6	115.2	122.9	129.0
82.5°	66.0	66.0	69.1	69.1	69.1	72.2	72.2	73.7	76.8	81.4	86.0
85°	41.5	41.5	41.5	43.0	41.5	43.0	46.1	44.5	46.1	49.2	49.2
87.5°	20.0	20.0	20.0	20.0	20.0	21.5	20.0	21.5	23.0	23.0	23.0
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: P997538

CATALOG NUMBER: SA2XXDP-B1005DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4
2.5°	2050.6	2042.9	2038.3	2041.4	2032.2	2009.1	2009.1	2016.8	2007.6	1998.4	1984.5
5°	2107.4	2092.1	2082.8	2081.3	2059.8	2022.9	2015.3	2007.6	1987.6	1966.1	1943.1
7.5°	2162.7	2135.1	2119.7	2109.0	2078.2	2030.6	2010.7	1993.8	1961.5	1929.2	1900.1
10°	2208.8	2168.9	2150.4	2133.5	2093.6	2033.7	2001.4	1970.7	1929.2	1887.8	1850.9
12.5°	2245.7	2199.6	2176.5	2152.0	2102.8	2024.5	1984.5	1935.4	1893.9	1838.6	1801.8
15°	2307.1	2211.9	2190.4	2167.3	2116.6	2009.1	1960.0	1904.7	1847.8	1774.1	1734.2
17.5°	2356.3	2228.8	2227.2	2178.1	2112.0	2003.0	1927.7	1855.5	1794.1	1720.3	1657.4
20°	2385.4	2254.9	2230.3	2179.6	2096.7	1961.5	1883.2	1803.3	1737.2	1648.2	1585.2
22.5°	2410.0	2291.7	2227.2	2165.8	2064.4	1947.7	1832.5	1757.2	1666.6	1569.8	1509.9
25°	2419.2	2299.4	2231.8	2161.2	2041.4	1907.7	1777.2	1695.8	1594.4	1506.8	1425.4
27.5°	2420.8	2297.9	2214.9	2141.2	2009.1	1855.5	1721.9	1635.9	1523.7	1422.4	1340.9
30°	2405.4	2281.0	2205.7	2125.9	1978.4	1807.9	1654.3	1559.1	1439.3	1337.9	1253.4
32.5°	2359.3	2247.2	2185.8	2098.2	1938.5	1741.8	1589.8	1483.8	1357.8	1258.0	1176.6
35°	2282.5	2205.7	2138.1	2056.7	1886.2	1680.4	1525.3	1400.9	1273.4	1178.1	1101.3
37.5°	2187.3	2145.8	2082.8	2003.0	1826.3	1625.1	1453.1	1314.8	1187.3	1095.2	1019.9
40°	2058.3	2069.0	2007.6	1935.4	1755.7	1549.8	1359.4	1227.3	1107.5	1021.5	947.7
42.5°	1918.5	1963.0	1927.7	1858.6	1677.3	1466.9	1290.3	1144.3	1027.6	938.5	877.1
45°	1768.0	1844.8	1823.3	1772.6	1595.9	1379.3	1192.0	1050.6	947.7	861.7	807.9
47.5°	1603.6	1712.7	1712.7	1675.8	1505.3	1291.8	1107.5	963.1	861.7	800.3	748.0
50°	1436.2	1559.1	1579.0	1554.5	1403.9	1192.0	1004.6	874.0	786.4	726.5	688.1
52.5°	1261.1	1403.9	1440.8	1428.5	1296.4	1096.7	920.1	792.6	712.7	660.5	626.7
55°	1093.6	1259.5	1299.5	1304.1	1181.2	992.3	826.4	714.3	637.4	602.1	572.9
57.5°	935.4	1095.2	1139.7	1147.4	1064.5	897.0	738.8	640.5	571.4	542.2	519.2
60°	800.3	933.9	992.3	1009.2	937.0	786.4	657.4	562.2	510.0	482.3	460.8
62.5°	689.7	797.2	858.6	863.2	831.0	689.7	572.9	493.1	448.5	423.9	413.2
65°	582.2	678.9	715.8	734.2	708.1	597.5	494.6	428.6	393.2	371.7	361.0
67.5°	496.1	557.6	588.3	612.9	586.8	503.8	420.9	367.1	341.0	319.5	313.3
70°	407.0	457.7	480.8	505.4	482.3	419.3	359.4	310.3	287.2	270.3	262.7
72.5°	325.6	365.6	387.1	402.4	388.6	336.4	287.2	253.4	236.5	224.3	219.7
75°	258.1	285.7	298.0	308.7	302.6	262.7	231.9	204.3	188.9	178.2	175.1
77.5°	196.6	216.6	230.4	233.5	225.8	199.7	173.6	156.7	144.4	138.2	135.2
80°	139.8	152.1	159.7	164.4	156.7	145.9	127.5	115.2	104.4	96.8	95.2
82.5°	93.7	99.8	106.0	104.4	101.4	92.2	81.4	75.3	70.7	64.5	64.5
85°	53.8	55.3	58.4	59.9	58.4	52.2	46.1	43.0	39.9	35.3	35.3
87.5°	23.0	24.6	24.6	26.1	23.0	23.0	20.0	16.9	16.9	15.4	13.8
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):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4
2.5°	1976.9	1984.5	1983.0	1967.6	1950.7	1936.9	1910.8	1913.9	1904.7	1906.2	1915.4
5°	1927.7	1927.7	1921.6	1900.1	1872.4	1857.1	1827.9	1820.2	1801.8	1800.2	1798.7
7.5°	1875.5	1867.8	1860.1	1829.4	1795.6	1771.0	1731.1	1721.9	1703.4	1691.2	1685.0
10°	1814.0	1803.3	1787.9	1752.6	1711.1	1680.4	1638.9	1626.6	1591.3	1576.0	1566.7
12.5°	1746.5	1740.3	1715.7	1686.6	1619.0	1585.2	1525.3	1537.6	1502.2	1471.5	1466.9
15°	1678.9	1655.8	1642.0	1594.4	1513.0	1497.6	1450.0	1425.4	1393.2	1368.6	1368.6
17.5°	1612.8	1577.5	1546.8	1496.1	1436.2	1393.2	1357.8	1345.6	1305.6	1281.0	1276.4
20°	1525.3	1485.3	1477.7	1405.5	1364.0	1316.4	1282.6	1251.9	1222.7	1211.9	1204.2
22.5°	1442.3	1396.2	1384.0	1322.5	1281.0	1233.4	1199.6	1178.1	1156.6	1148.9	1135.1
25°	1353.2	1325.6	1307.2	1241.1	1195.0	1150.5	1127.4	1112.1	1092.1	1090.6	1081.4
27.5°	1267.2	1241.1	1222.7	1159.7	1125.9	1084.4	1066.0	1049.1	1038.4	1033.7	1029.1
30°	1193.5	1164.3	1142.8	1096.7	1055.2	1021.5	1006.1	995.3	989.2	981.5	980.0
32.5°	1112.1	1095.2	1066.0	1030.7	998.4	966.2	956.9	949.3	940.0	937.0	935.4
35°	1043.0	1019.9	1001.5	961.5	947.7	920.1	909.3	903.2	890.9	887.8	884.7
37.5°	975.4	953.9	933.9	909.3	883.2	867.9	861.7	852.5	846.3	847.9	844.8
40°	907.8	890.9	875.5	849.4	834.1	826.4	814.1	804.9	801.8	803.3	801.8
42.5°	841.7	826.4	817.2	797.2	781.8	774.2	766.5	757.3	761.9	761.9	766.5
45°	781.8	768.0	761.9	746.5	737.3	725.0	717.3	715.8	721.9	720.4	720.4
47.5°	720.4	715.8	708.1	694.3	682.0	674.3	672.8	672.8	678.9	682.0	680.5
50°	672.8	663.6	654.3	643.6	634.4	631.3	626.7	629.8	635.9	635.9	639.0
52.5°	612.9	606.7	603.7	594.4	588.3	588.3	588.3	589.8	594.4	599.0	597.5
55°	560.6	556.0	553.0	548.4	540.7	542.2	540.7	543.8	548.4	553.0	556.0
57.5°	505.4	503.8	500.7	493.1	493.1	491.5	496.1	497.7	505.4	508.4	513.0
60°	456.2	451.6	451.6	445.4	445.4	445.4	450.1	454.7	460.8	462.3	465.4
62.5°	404.0	404.0	402.4	397.8	397.8	402.4	404.0	410.1	413.2	413.2	417.8
65°	354.8	353.3	351.7	353.3	354.8	354.8	359.4	362.5	365.6	367.1	368.6
67.5°	305.7	304.1	307.2	305.7	308.7	314.9	313.3	318.0	322.6	322.6	324.1
70°	259.6	262.7	261.1	264.2	262.7	265.7	270.3	271.9	271.9	273.4	278.0
72.5°	216.6	216.6	216.6	215.0	216.6	219.7	222.7	224.3	227.3	228.9	233.5
75°	175.1	175.1	172.0	175.1	175.1	178.2	181.3	181.3	181.3	184.3	188.9
77.5°	132.1	133.6	132.1	135.2	135.2	136.7	139.8	138.2	141.3	142.9	144.4
80°	96.8	95.2	95.2	95.2	96.8	96.8	99.8	101.4	101.4	106.0	102.9
82.5°	61.4	63.0	61.4	63.0	63.0	64.5	63.0	64.5	66.0	69.1	67.6
85°	35.3	33.8	33.8	35.3	33.8	33.8	35.3	33.8	35.3	33.8	35.3
87.5°	13.8	12.3	12.3	12.3	12.3	10.8	10.8	9.2	9.2	9.2	7.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P997538

CATALOG NUMBER: SA2XXDP-B1005DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4
2.5°	1904.7	1909.3	1898.5	1895.5	1898.5	1887.8	1890.8	1893.9	1893.9	1898.5	1901.6
5°	1794.1	1787.9	1777.2	1774.1	1771.0	1775.6	1772.6	1777.2	1778.7	1789.5	1791.0
7.5°	1685.0	1675.8	1666.6	1657.4	1654.3	1646.6	1654.3	1654.3	1665.0	1662.0	1669.7
10°	1556.0	1554.5	1542.2	1537.6	1531.4	1519.1	1536.0	1531.4	1539.1	1552.9	1556.0
12.5°	1460.8	1443.9	1451.5	1430.0	1437.7	1425.4	1427.0	1427.0	1439.3	1440.8	1437.7
15°	1370.1	1356.3	1336.3	1327.1	1322.5	1316.4	1336.3	1337.9	1328.7	1350.2	1342.5
17.5°	1278.0	1278.0	1259.5	1254.9	1242.6	1248.8	1245.7	1247.2	1244.2	1259.5	1267.2
20°	1198.1	1190.4	1184.3	1185.8	1170.4	1167.4	1164.3	1167.4	1178.1	1188.9	1192.0
22.5°	1133.6	1129.0	1113.6	1116.7	1104.4	1109.0	1105.9	1113.6	1115.2	1115.2	1125.9
25°	1072.1	1066.0	1067.5	1061.4	1056.8	1056.8	1052.2	1056.8	1062.9	1066.0	1067.5
27.5°	1026.1	1021.5	1013.8	1009.2	1012.2	1004.6	1010.7	1015.3	1015.3	1012.2	1015.3
30°	970.8	973.8	973.8	958.5	964.6	961.5	966.2	969.2	969.2	970.8	967.7
32.5°	933.9	924.7	923.1	921.6	921.6	915.5	915.5	920.1	921.6	923.1	927.8
35°	884.7	884.7	877.1	881.7	875.5	877.1	875.5	877.1	880.1	875.5	880.1
37.5°	840.2	841.7	838.7	841.7	843.3	840.2	837.1	843.3	840.2	840.2	837.1
40°	801.8	800.3	801.8	801.8	801.8	803.3	800.3	800.3	800.3	797.2	794.1
42.5°	769.5	760.3	763.4	764.9	760.3	760.3	761.9	760.3	764.9	755.7	755.7
45°	723.5	720.4	721.9	721.9	725.0	720.4	723.5	725.0	720.4	718.9	715.8
47.5°	682.0	685.1	682.0	685.1	685.1	688.1	682.0	683.5	685.1	678.9	674.3
50°	640.5	640.5	645.1	643.6	645.1	642.1	642.1	640.5	642.1	639.0	634.4
52.5°	602.1	597.5	605.2	603.7	602.1	600.6	599.0	600.6	597.5	594.4	594.4
55°	554.5	554.5	559.1	560.6	560.6	557.6	554.5	556.0	554.5	553.0	551.4
57.5°	516.1	510.0	513.0	514.6	514.6	510.0	513.0	510.0	510.0	511.5	506.9
60°	467.0	467.0	463.9	468.5	468.5	465.4	465.4	467.0	463.9	462.3	460.8
62.5°	414.7	416.3	420.9	422.4	423.9	420.9	417.8	419.3	419.3	414.7	416.3
65°	370.2	373.3	379.4	377.9	374.8	376.3	373.3	374.8	370.2	371.7	367.1
67.5°	327.2	325.6	327.2	327.2	330.2	328.7	325.6	325.6	324.1	328.7	324.1
70°	281.1	281.1	281.1	281.1	282.6	284.2	281.1	278.0	279.6	276.5	274.9
72.5°	233.5	235.0	233.5	236.5	231.9	235.0	235.0	233.5	231.9	231.9	231.9
75°	188.9	192.0	187.4	188.9	187.4	190.5	188.9	188.9	185.9	184.3	185.9
77.5°	144.4	145.9	142.9	144.4	142.9	144.4	144.4	142.9	142.9	142.9	142.9
80°	102.9	104.4	102.9	101.4	99.8	102.9	99.8	101.4	102.9	101.4	104.4
82.5°	66.0	66.0	64.5	66.0	63.0	63.0	64.5	64.5	63.0	66.0	63.0
85°	32.3	32.3	35.3	32.3	30.7	30.7	30.7	32.3	30.7	33.8	32.3
87.5°	7.7	6.1	7.7	7.7	6.1	6.1	7.7	6.1	7.7	9.2	6.1
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):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4	1998.4
2.5°	1897.0	1909.3	1904.7	1887.8	1907.7	1907.7	1921.6	1921.6	1938.5	1944.6	1953.8
5°	1789.5	1798.7	1806.4	1798.7	1812.5	1834.0	1846.3	1857.1	1880.1	1889.3	1903.1
7.5°	1674.3	1691.2	1698.8	1698.8	1721.9	1746.5	1771.0	1786.4	1818.6	1830.9	1844.8
10°	1562.1	1582.1	1597.5	1595.9	1634.3	1649.7	1680.4	1715.7	1748.0	1766.4	1786.4
12.5°	1443.9	1454.6	1476.1	1506.8	1516.1	1543.7	1579.0	1623.6	1681.9	1698.8	1728.0
15°	1345.6	1374.7	1391.6	1405.5	1427.0	1453.1	1491.5	1534.5	1592.9	1629.7	1660.4
17.5°	1262.6	1301.0	1311.8	1308.7	1336.3	1376.3	1420.8	1453.1	1505.3	1549.8	1579.0
20°	1195.0	1210.4	1228.8	1236.5	1258.0	1301.0	1344.0	1380.9	1423.9	1459.2	1493.0
22.5°	1127.4	1139.7	1155.1	1168.9	1185.8	1210.4	1251.9	1297.9	1339.4	1373.2	1411.6
25°	1072.1	1079.8	1093.6	1104.4	1122.8	1139.7	1168.9	1219.6	1268.8	1288.7	1322.5
27.5°	1018.4	1024.5	1033.7	1046.0	1055.2	1072.1	1098.3	1139.7	1190.4	1210.4	1256.5
30°	970.8	975.4	984.6	990.7	995.3	1015.3	1035.3	1067.5	1105.9	1133.6	1167.4
32.5°	926.2	930.8	940.0	941.6	947.7	958.5	976.9	1006.1	1039.9	1062.9	1092.1
35°	877.1	880.1	889.4	892.4	897.0	906.3	920.1	941.6	972.3	989.2	1015.3
37.5°	838.7	837.1	843.3	847.9	854.0	858.6	863.2	884.7	907.8	923.1	943.1
40°	797.2	794.1	795.7	801.8	804.9	811.0	811.0	832.5	847.9	860.2	875.5
42.5°	755.7	754.2	751.1	754.2	757.3	758.8	760.3	775.7	791.1	801.8	818.7
45°	714.3	712.7	709.6	711.2	711.2	714.3	718.9	725.0	735.8	745.0	754.2
47.5°	675.8	672.8	668.2	666.6	669.7	669.7	669.7	675.8	686.6	689.7	698.9
50°	635.9	631.3	625.2	622.1	622.1	620.6	623.6	625.2	634.4	637.4	645.1
52.5°	592.9	589.8	583.7	577.5	579.1	576.0	577.5	579.1	582.2	586.8	591.4
55°	549.9	543.8	539.1	537.6	533.0	533.0	528.4	534.5	533.0	534.5	540.7
57.5°	508.4	502.3	494.6	491.5	486.9	485.4	482.3	480.8	482.3	486.9	491.5
60°	459.3	456.2	451.6	447.0	443.9	439.3	436.2	436.2	434.7	434.7	436.2
62.5°	411.7	410.1	404.0	402.4	399.4	396.3	391.7	388.6	388.6	391.7	393.2
65°	365.6	364.0	359.4	357.9	350.2	347.1	345.6	344.1	341.0	341.0	341.0
67.5°	322.6	318.0	318.0	310.3	304.1	301.1	298.0	296.5	296.5	296.5	298.0
70°	274.9	274.9	270.3	265.7	259.6	261.1	256.5	251.9	251.9	248.8	250.4
72.5°	228.9	227.3	222.7	221.2	216.6	212.0	208.9	212.0	207.4	205.8	207.4
75°	184.3	182.8	179.7	176.6	178.2	173.6	169.0	167.4	167.4	164.4	164.4
77.5°	141.3	144.4	138.2	136.7	133.6	130.6	129.0	127.5	127.5	127.5	130.6
80°	98.3	99.8	99.8	96.8	98.3	93.7	93.7	93.7	89.1	90.6	92.2
82.5°	63.0	63.0	61.4	63.0	61.4	61.4	59.9	59.9	58.4	58.4	59.9
85°	35.3	33.8	32.3	35.3	33.8	33.8	32.3	32.3	32.3	32.3	32.3
87.5°	7.7	9.2	9.2	9.2	9.2	10.8	10.8	10.8	12.3	12.3	12.3
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: P997538

CATALOG NUMBER: SA2XXDP-B1005DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	1998.4	1998.4	1998.4	1998.4
2.5°	1961.5	1961.5	1984.5	2009.1
5°	1918.5	1929.2	1966.1	1999.9
7.5°	1877.0	1895.5	1941.5	1984.5
10°	1826.3	1850.9	1907.7	1958.4
12.5°	1777.2	1800.2	1866.3	1923.1
15°	1708.1	1737.2	1807.9	1878.6
17.5°	1638.9	1668.1	1754.1	1837.1
20°	1557.5	1595.9	1692.7	1803.3
22.5°	1482.3	1529.9	1637.4	1726.5
25°	1399.3	1473.0	1572.9	1688.1
27.5°	1325.6	1399.3	1500.7	1617.4
30°	1242.6	1317.9	1422.4	1529.9
32.5°	1162.8	1231.9	1333.3	1465.4
35°	1079.8	1145.9	1244.2	1377.8
37.5°	1004.6	1069.1	1176.6	1299.5
40°	930.8	998.4	1090.6	1213.5
42.5°	861.7	921.6	1004.6	1127.4
45°	798.7	841.7	918.5	1033.7
47.5°	732.7	771.1	841.7	956.9
50°	671.2	703.5	764.9	872.5
52.5°	611.3	639.0	695.8	781.8
55°	557.6	583.7	625.2	709.6
57.5°	502.3	522.2	562.2	629.8
60°	448.5	467.0	499.2	554.5
62.5°	394.8	410.1	440.8	485.4
65°	347.1	359.4	382.5	420.9
67.5°	301.1	308.7	327.2	357.9
70°	256.5	262.7	278.0	302.6
72.5°	208.9	215.0	231.9	248.8
75°	169.0	170.5	182.8	196.6
77.5°	132.1	130.6	139.8	150.5
80°	90.6	95.2	102.9	107.5
82.5°	61.4	63.0	66.0	69.1
85°	33.8	35.3	35.3	39.9
87.5°	13.8	15.4	15.4	16.9
90°	0.0	0.0	0.0	0.0

TEST NUMBER: P997538

CATALOG NUMBER: SA2XXDP-B1005DB2750-4F0-XX-W2A-A_3000K

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	23.97	25.49	24.34	25.80	26.12	20.24	21.76	20.60	22.07	22.38
	3H	25.09	26.45	25.47	26.78	27.14	21.65	23.01	22.03	23.34	23.70
	4H	25.41	26.69	25.81	27.04	27.42	22.16	23.44	22.56	23.79	24.16
	6H	25.60	26.78	26.01	27.15	27.54	22.52	23.70	22.93	24.06	24.46
	8H	25.64	26.76	26.07	27.15	27.56	22.63	23.75	23.06	24.14	24.54
	12H	25.66	26.73	26.09	27.11	27.54	22.70	23.78	23.13	24.16	24.59
4H	2H	24.09	25.37	24.49	25.72	26.10	21.04	22.31	21.44	22.66	23.04
	3H	25.42	26.48	25.83	26.88	27.28	22.61	23.67	23.02	24.07	24.48
	4H	25.90	26.85	26.33	27.27	27.70	23.21	24.17	23.64	24.58	25.02
	6H	26.23	27.06	26.68	27.50	27.96	23.67	24.50	24.12	24.94	25.40
	8H	26.30	27.08	26.77	27.52	27.99	23.81	24.58	24.27	25.03	25.50
	12H	26.34	27.04	26.83	27.51	27.99	23.92	24.61	24.40	25.09	25.56
8H	4H	25.98	26.76	26.44	27.20	27.67	23.62	24.40	24.08	24.84	25.31
	6H	26.39	27.03	26.88	27.52	28.00	24.16	24.80	24.66	25.29	25.77
	8H	26.52	27.09	27.03	27.60	28.09	24.36	24.94	24.88	25.44	25.93
	12H	26.61	27.11	27.12	27.60	28.17	24.53	25.03	25.04	25.52	26.09
12H	4H	25.97	26.66	26.45	27.14	27.61	23.68	24.37	24.16	24.85	25.32
	6H	26.38	26.96	26.90	27.47	27.95	24.24	24.81	24.75	25.32	25.81
	8H	26.55	27.06	27.06	27.55	28.11	24.49	24.99	25.00	25.49	26.05