

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: HALO COMMERCIAL

Report Number: P776727

Luminaire Tested: HCDJBS4050CSD-HCD6TSQH-5000lm-3500K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776727
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2310613A001)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS4050CSD-HCD6TSQH-5000lm-3500K
Description: 6 INCH SQUARE MEDIUM HAZE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT
Ballast/Driver: -

Summary

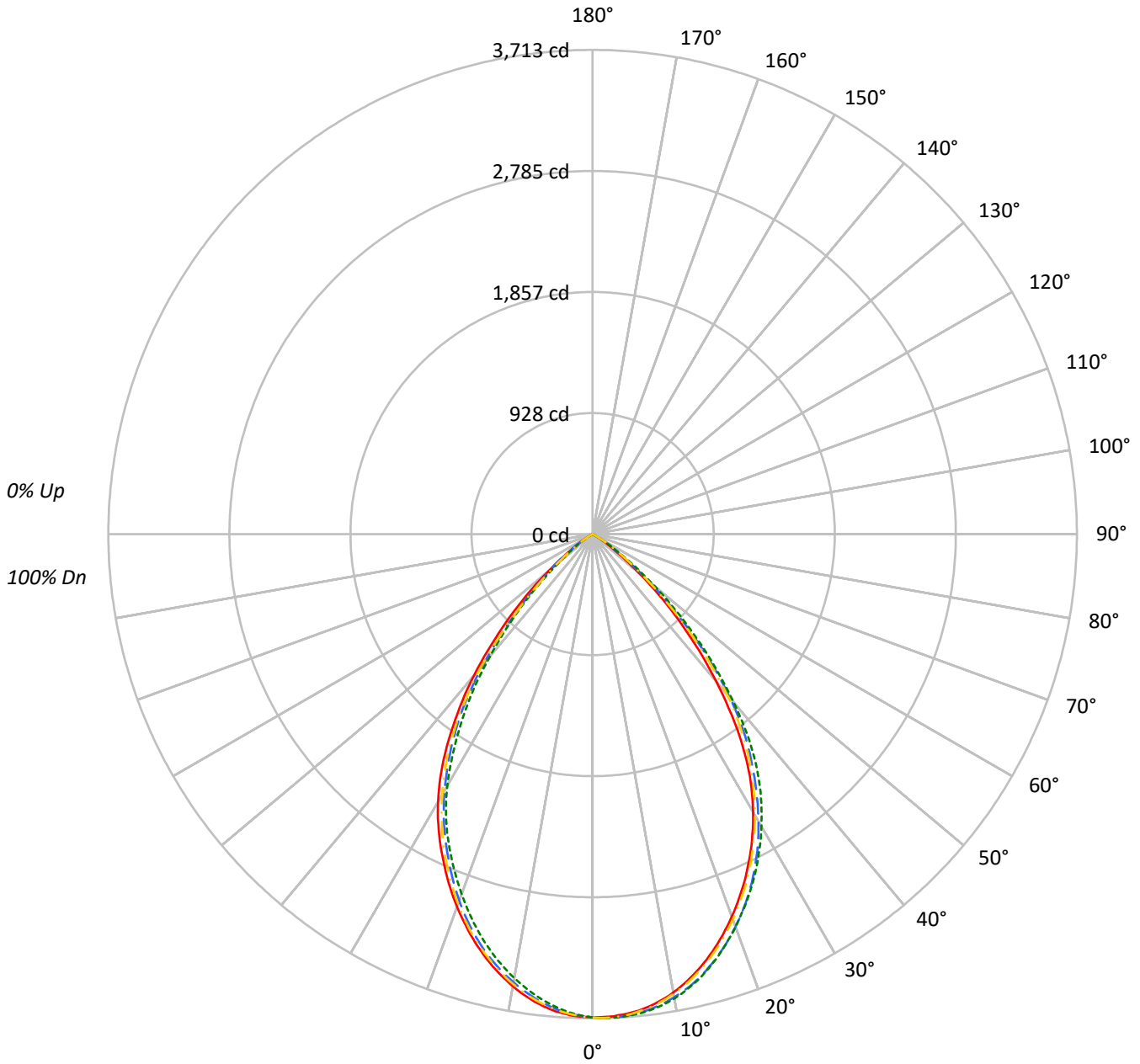
Lumens per Lamp: N/A
Luminaire Lumens: 4661.9 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.02 / 1.06
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 48
Input Voltage (V): NR
Input Current (A_{in}): 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: P776727
CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-5000lm-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P776727

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-5000lm-3500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|-----|---|--|---|
| RF | 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 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | 100 | | | |
| 1 | 113 | 110 | 107 | 105 | 110 | 108 | 105 | 103 | 104 | 102 | 100 | 100 | 98 | 97 | 96 | 95 | 94 | 92 | | | | | 92 | | | |
| 2 | 106 | 101 | 97 | 93 | 104 | 99 | 95 | 92 | 96 | 93 | 90 | 93 | 90 | 88 | 90 | 88 | 86 | 84 | | | | | 84 | | | |
| 3 | 100 | 93 | 87 | 83 | 98 | 92 | 86 | 82 | 89 | 85 | 81 | 86 | 83 | 80 | 84 | 81 | 78 | 77 | | | | | 77 | | | |
| 4 | 94 | 86 | 80 | 75 | 92 | 85 | 79 | 74 | 82 | 77 | 73 | 80 | 76 | 73 | 78 | 75 | 72 | 70 | | | | | 70 | | | |
| 5 | 89 | 79 | 73 | 68 | 87 | 78 | 72 | 68 | 76 | 71 | 67 | 75 | 70 | 66 | 73 | 69 | 66 | 64 | | | | | 64 | | | |
| 6 | 83 | 73 | 67 | 62 | 82 | 73 | 66 | 62 | 71 | 65 | 61 | 69 | 64 | 61 | 68 | 64 | 60 | 59 | | | | | 59 | | | |
| 7 | 78 | 68 | 61 | 57 | 77 | 67 | 61 | 56 | 66 | 60 | 56 | 65 | 60 | 56 | 64 | 59 | 55 | 54 | | | | | 54 | | | |
| 8 | 74 | 63 | 57 | 52 | 73 | 63 | 56 | 52 | 62 | 56 | 52 | 61 | 55 | 51 | 59 | 55 | 51 | 50 | | | | | 50 | | | |
| 9 | 70 | 59 | 53 | 48 | 69 | 59 | 52 | 48 | 58 | 52 | 48 | 57 | 51 | 48 | 56 | 51 | 47 | 46 | | | | | 46 | | | |
| 10 | 66 | 55 | 49 | 45 | 65 | 55 | 49 | 45 | 54 | 48 | 44 | 53 | 48 | 44 | 52 | 48 | 44 | 43 | | | | | 43 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° | 270° |
|-----|--------|--------|--------|--------|
| 0° | 203218 | 203218 | 203218 | 203218 |
| 5° | 202316 | 203549 | 201403 | 199367 |
| 10° | 198666 | 201288 | 196016 | 192509 |
| 15° | 191687 | 195586 | 187833 | 183134 |
| 20° | 182080 | 186963 | 177366 | 171322 |
| 25° | 170308 | 176696 | 164852 | 158047 |
| 30° | 155752 | 163854 | 150042 | 141117 |
| 35° | 135245 | 146936 | 128526 | 116888 |
| 40° | 105426 | 120111 | 101326 | 87807 |
| 45° | 72287 | 87187 | 69519 | 56448 |
| 50° | 39811 | 52706 | 38080 | 27718 |
| 55° | 15225 | 23139 | 16468 | 11804 |
| 60° | 2006 | 5921 | 3969 | 1557 |
| 65° | 259 | 480 | 363 | 259 |
| 70° | 64 | 128 | 128 | 128 |
| 75° | 85 | 85 | 85 | 85 |
| 80° | 0 | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 87187 cd/sqm



TEST NUMBER: P776727

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-5000lm-3500K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 346.1 | 7.4 |
| 10°-20° | 938.2 | 20.1 |
| 20°-30° | 1269.1 | 27.2 |
| 30°-40° | 1218.4 | 26.1 |
| 40°-50° | 709.6 | 15.2 |
| 50°-60° | 174.6 | 3.7 |
| 60°-70° | 5.6 | 0.1 |
| 70°-80° | 0.3 | 0.0 |
| 80°-90° | 0.0 | 0.0 |
| 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° | 2553.4 | 54.8 |
| 0°-40° | 3771.8 | 80.9 |
| 0°-60° | 4656.0 | 99.9 |
| 0°-90° | 4661.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4661.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 3707 | 3707 | 3707 | 3707 | 3707 | |
| 5° | 3676 | 3699 | 3660 | 3623 | 3676 | 348 |
| 15° | 3378 | 3446 | 3310 | 3227 | 3378 | 947 |
| 25° | 2816 | 2921 | 2725 | 2613 | 2816 | 1290 |
| 35° | 2021 | 2196 | 1920 | 1747 | 2021 | 1244 |
| 45° | 932 | 1125 | 897 | 728 | 932 | 720 |
| 55° | 159 | 242 | 172 | 124 | 159 | 164 |
| 65° | 2 | 4 | 3 | 2 | 2 | 4 |
| 75° | 0 | 0 | 0 | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P776727

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-5000lm-3500K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3707.0 | 3707.0 | 3707.0 | 3707.0 | 3707.0 | 3707.0 | 3707.0 | 3707.0 | 3707.0 | 3707.0 | 3707.0 |
| 0.5° | 3706.2 | 3706.6 | 3709.4 | 3711.9 | 3708.2 | 3709.8 | 3710.6 | 3709.0 | 3705.4 | 3703.7 | 3704.1 |
| 1° | 3705.4 | 3707.0 | 3711.1 | 3713.9 | 3710.6 | 3711.5 | 3711.5 | 3708.6 | 3703.7 | 3700.5 | 3700.9 |
| 1.5° | 3704.1 | 3707.0 | 3711.5 | 3715.1 | 3711.9 | 3712.7 | 3711.1 | 3707.4 | 3702.1 | 3697.2 | 3696.4 |
| 2° | 3702.1 | 3706.6 | 3711.5 | 3715.1 | 3712.7 | 3712.7 | 3710.6 | 3705.4 | 3698.1 | 3693.2 | 3691.1 |
| 2.5° | 3702.1 | 3705.0 | 3710.2 | 3714.3 | 3711.9 | 3711.5 | 3708.6 | 3702.5 | 3694.8 | 3687.9 | 3684.6 |
| 3° | 3696.0 | 3702.5 | 3709.0 | 3713.1 | 3711.1 | 3710.2 | 3705.8 | 3698.1 | 3689.1 | 3681.8 | 3677.3 |
| 3.5° | 3692.4 | 3699.7 | 3706.6 | 3711.1 | 3709.0 | 3707.0 | 3702.1 | 3693.6 | 3683.4 | 3674.9 | 3670.4 |
| 4° | 3687.9 | 3696.4 | 3703.3 | 3708.2 | 3706.2 | 3704.1 | 3698.1 | 3687.5 | 3676.9 | 3667.6 | 3660.7 |
| 4.5° | 3682.2 | 3692.4 | 3699.3 | 3704.6 | 3702.9 | 3700.1 | 3692.4 | 3681.0 | 3669.6 | 3658.2 | 3651.3 |
| 5° | 3676.5 | 3687.1 | 3694.8 | 3700.5 | 3698.9 | 3695.2 | 3686.3 | 3673.7 | 3659.9 | 3648.5 | 3640.8 |
| 5.5° | 3671.2 | 3681.0 | 3689.9 | 3695.2 | 3694.4 | 3689.9 | 3679.0 | 3665.1 | 3649.7 | 3637.9 | 3629.0 |
| 6° | 3661.9 | 3674.1 | 3683.8 | 3689.5 | 3689.1 | 3683.4 | 3670.8 | 3655.0 | 3639.1 | 3626.5 | 3616.8 |
| 6.5° | 3653.8 | 3667.2 | 3676.9 | 3683.4 | 3682.6 | 3676.1 | 3663.1 | 3644.0 | 3627.4 | 3614.4 | 3603.0 |
| 7° | 3644.4 | 3658.6 | 3668.8 | 3676.5 | 3675.7 | 3668.8 | 3653.0 | 3633.0 | 3615.2 | 3601.0 | 3590.0 |
| 7.5° | 3633.9 | 3649.3 | 3660.3 | 3668.0 | 3667.6 | 3660.3 | 3642.8 | 3620.0 | 3601.0 | 3586.3 | 3574.5 |
| 8° | 3622.5 | 3639.1 | 3651.3 | 3658.6 | 3659.1 | 3651.3 | 3631.8 | 3607.0 | 3586.7 | 3571.3 | 3559.5 |
| 8.5° | 3610.7 | 3628.2 | 3641.2 | 3648.9 | 3649.7 | 3640.8 | 3619.6 | 3593.2 | 3571.7 | 3555.9 | 3542.9 |
| 9° | 3597.7 | 3616.0 | 3630.6 | 3638.3 | 3639.1 | 3629.8 | 3607.5 | 3578.6 | 3555.4 | 3539.6 | 3527.0 |
| 9.5° | 3583.5 | 3603.8 | 3618.4 | 3627.0 | 3628.2 | 3618.4 | 3593.2 | 3562.8 | 3539.6 | 3522.1 | 3509.1 |
| 10° | 3568.9 | 3590.4 | 3606.6 | 3614.8 | 3616.0 | 3605.4 | 3579.0 | 3546.9 | 3521.3 | 3504.7 | 3490.8 |
| 10.5° | 3553.0 | 3575.8 | 3593.2 | 3601.8 | 3602.6 | 3592.0 | 3564.0 | 3529.4 | 3503.4 | 3486.4 | 3472.2 |
| 11° | 3536.8 | 3561.1 | 3580.2 | 3587.9 | 3588.8 | 3577.0 | 3548.1 | 3512.0 | 3484.3 | 3467.3 | 3453.1 |
| 11.5° | 3519.7 | 3545.3 | 3564.8 | 3572.9 | 3573.7 | 3561.9 | 3531.9 | 3493.7 | 3464.0 | 3447.8 | 3433.2 |
| 12° | 3500.6 | 3528.6 | 3550.2 | 3557.1 | 3557.9 | 3545.3 | 3514.0 | 3474.6 | 3444.1 | 3427.5 | 3412.4 |
| 12.5° | 3481.9 | 3511.2 | 3533.1 | 3541.2 | 3541.2 | 3528.2 | 3495.7 | 3455.1 | 3423.4 | 3406.3 | 3391.7 |
| 13° | 3462.8 | 3493.7 | 3516.8 | 3525.0 | 3525.0 | 3510.8 | 3477.8 | 3435.2 | 3402.3 | 3384.8 | 3370.2 |
| 13.5° | 3442.1 | 3474.2 | 3499.0 | 3506.3 | 3505.5 | 3491.3 | 3457.5 | 3414.1 | 3379.5 | 3362.9 | 3347.8 |
| 14° | 3421.8 | 3455.1 | 3480.3 | 3488.0 | 3486.4 | 3472.2 | 3437.6 | 3392.5 | 3357.2 | 3339.7 | 3324.7 |
| 14.5° | 3399.8 | 3434.4 | 3460.8 | 3468.9 | 3465.7 | 3451.0 | 3416.9 | 3369.8 | 3334.0 | 3315.3 | 3301.1 |
| 15° | 3377.5 | 3414.1 | 3440.5 | 3449.0 | 3446.2 | 3430.3 | 3394.6 | 3347.0 | 3309.6 | 3290.5 | 3276.7 |
| 15.5° | 3354.3 | 3392.1 | 3419.7 | 3429.1 | 3424.2 | 3408.8 | 3371.8 | 3323.5 | 3284.9 | 3266.6 | 3251.5 |
| 16° | 3330.8 | 3369.4 | 3398.2 | 3406.7 | 3402.7 | 3386.4 | 3349.5 | 3299.5 | 3260.1 | 3241.0 | 3225.1 |
| 16.5° | 3306.4 | 3346.6 | 3375.5 | 3384.8 | 3379.9 | 3362.9 | 3325.5 | 3274.7 | 3234.5 | 3214.2 | 3198.3 |
| 17° | 3281.6 | 3323.0 | 3353.1 | 3362.5 | 3356.0 | 3339.3 | 3301.5 | 3249.5 | 3207.7 | 3186.5 | 3171.1 |
| 17.5° | 3255.6 | 3299.1 | 3329.5 | 3339.7 | 3332.4 | 3314.9 | 3276.3 | 3222.7 | 3181.3 | 3158.9 | 3142.2 |
| 18° | 3230.0 | 3273.9 | 3305.6 | 3315.3 | 3307.2 | 3290.1 | 3251.5 | 3196.7 | 3152.8 | 3130.5 | 3113.0 |
| 18.5° | 3203.6 | 3248.3 | 3280.4 | 3291.0 | 3282.0 | 3264.9 | 3225.1 | 3169.1 | 3125.2 | 3101.2 | 3084.1 |
| 19° | 3176.4 | 3222.3 | 3256.0 | 3266.2 | 3256.8 | 3239.4 | 3198.3 | 3141.4 | 3097.2 | 3072.8 | 3052.9 |
| 19.5° | 3148.7 | 3195.5 | 3229.6 | 3240.6 | 3231.2 | 3212.5 | 3171.1 | 3113.0 | 3069.5 | 3041.9 | 3021.6 |
| 20° | 3121.1 | 3168.7 | 3204.0 | 3214.6 | 3204.8 | 3184.9 | 3144.3 | 3085.4 | 3040.3 | 3011.4 | 2990.3 |
| 20.5° | 3092.3 | 3140.2 | 3177.2 | 3186.5 | 3176.8 | 3158.1 | 3115.8 | 3056.1 | 3010.6 | 2980.5 | 2959.0 |
| 21° | 3063.4 | 3111.8 | 3150.0 | 3159.7 | 3149.6 | 3130.1 | 3086.6 | 3027.3 | 2981.4 | 2950.1 | 2927.7 |



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CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-5000lm-3500K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 22.5° | 2974.5 | 3023.2 | 3064.2 | 3073.6 | 3068.3 | 3042.7 | 2998.0 | 2940.3 | 2888.7 | 2854.2 | 2825.7 |
| 23° | 2944.0 | 2992.3 | 3034.2 | 3043.9 | 3039.5 | 3011.8 | 2968.8 | 2909.0 | 2855.8 | 2820.9 | 2791.6 |
| 23.5° | 2913.1 | 2960.6 | 3003.7 | 3013.5 | 3010.6 | 2981.0 | 2939.1 | 2877.8 | 2823.7 | 2786.7 | 2756.3 |
| 24° | 2881.0 | 2929.4 | 2971.6 | 2982.2 | 2981.8 | 2950.1 | 2907.4 | 2846.1 | 2790.8 | 2753.0 | 2721.3 |
| 24.5° | 2848.5 | 2897.3 | 2939.9 | 2950.9 | 2952.9 | 2924.1 | 2874.5 | 2814.0 | 2759.1 | 2718.9 | 2685.6 |
| 25° | 2815.6 | 2864.8 | 2907.4 | 2918.8 | 2921.2 | 2892.0 | 2841.2 | 2781.9 | 2725.4 | 2684.8 | 2651.0 |
| 25.5° | 2782.7 | 2830.2 | 2874.5 | 2885.5 | 2889.5 | 2859.1 | 2807.9 | 2748.6 | 2692.1 | 2649.8 | 2615.3 |
| 26° | 2749.8 | 2797.3 | 2840.4 | 2853.0 | 2858.3 | 2827.0 | 2774.1 | 2716.1 | 2658.8 | 2615.3 | 2579.9 |
| 26.5° | 2714.8 | 2763.6 | 2805.4 | 2819.2 | 2826.6 | 2792.8 | 2739.2 | 2682.3 | 2625.0 | 2580.3 | 2543.8 |
| 27° | 2680.7 | 2727.8 | 2770.9 | 2785.1 | 2794.5 | 2759.9 | 2705.1 | 2649.0 | 2589.7 | 2545.4 | 2508.0 |
| 27.5° | 2644.9 | 2691.7 | 2734.7 | 2750.6 | 2760.7 | 2725.4 | 2670.5 | 2614.9 | 2556.0 | 2509.7 | 2471.1 |
| 28° | 2609.6 | 2655.5 | 2697.4 | 2714.8 | 2727.0 | 2691.3 | 2635.6 | 2579.9 | 2520.6 | 2471.9 | 2432.9 |
| 28.5° | 2573.4 | 2618.9 | 2660.0 | 2679.1 | 2693.7 | 2656.3 | 2600.3 | 2545.4 | 2485.3 | 2433.7 | 2393.5 |
| 29° | 2536.5 | 2581.6 | 2621.8 | 2642.5 | 2659.6 | 2621.4 | 2563.7 | 2509.2 | 2448.3 | 2395.9 | 2354.0 |
| 29.5° | 2498.7 | 2542.6 | 2582.4 | 2605.5 | 2623.8 | 2586.4 | 2527.1 | 2471.5 | 2409.7 | 2356.5 | 2312.2 |
| 30° | 2460.5 | 2503.2 | 2543.0 | 2567.8 | 2588.5 | 2550.7 | 2489.7 | 2433.7 | 2370.3 | 2316.7 | 2270.8 |
| 30.5° | 2421.5 | 2463.3 | 2503.2 | 2527.9 | 2552.3 | 2513.7 | 2452.0 | 2394.3 | 2331.3 | 2274.8 | 2228.5 |
| 31° | 2381.7 | 2422.7 | 2460.9 | 2489.7 | 2517.0 | 2476.7 | 2413.0 | 2354.9 | 2289.4 | 2233.0 | 2185.4 |
| 31.5° | 2340.6 | 2381.3 | 2420.7 | 2449.5 | 2478.8 | 2439.4 | 2373.5 | 2314.2 | 2246.8 | 2190.7 | 2142.0 |
| 32° | 2298.0 | 2338.2 | 2378.0 | 2408.5 | 2441.0 | 2401.2 | 2334.1 | 2272.8 | 2202.9 | 2147.2 | 2097.3 |
| 32.5° | 2256.1 | 2297.2 | 2335.8 | 2366.6 | 2402.8 | 2361.8 | 2293.5 | 2230.5 | 2158.6 | 2103.0 | 2053.4 |
| 33° | 2212.3 | 2253.7 | 2293.9 | 2325.6 | 2363.8 | 2321.9 | 2252.5 | 2186.2 | 2113.1 | 2057.0 | 2009.5 |
| 33.5° | 2167.2 | 2210.2 | 2252.9 | 2283.8 | 2322.8 | 2281.7 | 2211.0 | 2141.6 | 2066.4 | 2011.1 | 1965.2 |
| 34° | 2119.6 | 2165.5 | 2209.4 | 2241.5 | 2282.5 | 2240.3 | 2168.8 | 2096.5 | 2019.3 | 1965.6 | 1920.1 |
| 34.5° | 2071.3 | 2121.6 | 2165.9 | 2198.8 | 2238.7 | 2196.8 | 2126.9 | 2050.1 | 1969.3 | 1916.9 | 1873.8 |
| 35° | 2020.9 | 2075.7 | 2121.6 | 2154.2 | 2195.6 | 2153.7 | 2083.9 | 2002.6 | 1920.5 | 1868.1 | 1827.9 |
| 35.5° | 1970.5 | 2029.8 | 2079.4 | 2109.9 | 2150.1 | 2110.3 | 2040.8 | 1955.5 | 1872.2 | 1819.8 | 1780.8 |
| 36° | 1916.5 | 1983.5 | 2033.1 | 2065.6 | 2104.6 | 2066.0 | 1996.5 | 1907.9 | 1823.4 | 1770.6 | 1732.0 |
| 36.5° | 1862.4 | 1934.3 | 1989.6 | 2021.3 | 2055.8 | 2020.1 | 1950.6 | 1859.6 | 1773.9 | 1720.6 | 1681.6 |
| 37° | 1806.8 | 1884.4 | 1943.3 | 1974.6 | 2006.3 | 1972.5 | 1903.5 | 1811.6 | 1722.7 | 1670.3 | 1628.8 |
| 37.5° | 1751.5 | 1832.4 | 1895.8 | 1926.6 | 1955.1 | 1923.8 | 1855.9 | 1762.1 | 1674.3 | 1619.1 | 1577.2 |
| 38° | 1694.2 | 1779.1 | 1846.2 | 1875.0 | 1902.3 | 1872.6 | 1806.4 | 1712.9 | 1623.5 | 1566.7 | 1522.8 |
| 38.5° | 1639.8 | 1725.9 | 1796.6 | 1826.7 | 1846.6 | 1821.0 | 1756.0 | 1663.4 | 1573.2 | 1513.8 | 1468.7 |
| 39° | 1582.9 | 1670.7 | 1744.2 | 1773.9 | 1791.7 | 1767.8 | 1703.6 | 1613.4 | 1521.6 | 1460.6 | 1414.7 |
| 39.5° | 1528.1 | 1615.4 | 1691.0 | 1721.0 | 1735.3 | 1712.5 | 1650.4 | 1561.8 | 1470.4 | 1407.0 | 1358.6 |
| 40° | 1473.2 | 1556.9 | 1635.3 | 1666.2 | 1678.4 | 1654.4 | 1595.9 | 1509.0 | 1415.9 | 1351.7 | 1302.6 |
| 40.5° | 1418.8 | 1500.0 | 1581.7 | 1610.1 | 1622.3 | 1596.3 | 1541.5 | 1456.1 | 1362.7 | 1297.3 | 1245.3 |
| 41° | 1363.5 | 1446.4 | 1526.8 | 1552.8 | 1566.2 | 1537.0 | 1483.0 | 1402.9 | 1308.3 | 1243.2 | 1188.4 |
| 41.5° | 1309.1 | 1390.7 | 1470.8 | 1496.0 | 1512.2 | 1478.5 | 1425.7 | 1350.5 | 1253.8 | 1191.6 | 1132.3 |
| 42° | 1254.2 | 1334.7 | 1413.1 | 1462.2 | 1457.0 | 1419.6 | 1367.6 | 1294.8 | 1199.0 | 1137.6 | 1077.1 |
| 42.5° | 1199.4 | 1279.0 | 1355.4 | 1400.5 | 1403.7 | 1361.1 | 1310.3 | 1240.0 | 1148.2 | 1085.2 | 1023.9 |
| 43° | 1143.7 | 1222.9 | 1297.7 | 1337.5 | 1349.7 | 1303.4 | 1253.4 | 1183.9 | 1095.8 | 1033.2 | 972.7 |
| 43.5° | 1089.3 | 1168.9 | 1240.4 | 1274.9 | 1292.4 | 1246.9 | 1196.5 | 1129.5 | 1046.6 | 982.0 | 922.3 |



TEST NUMBER: P776727

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-5000lm-3500K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|-------|--------|--------|--------|--------|--------|--------|--------|-------|--------|-------|
| 45° | 932.4 | 1006.8 | 1066.9 | 1100.2 | 1124.6 | 1079.5 | 1027.5 | 966.6 | 896.7 | 832.5 | 779.7 |
| 45.5° | 882.9 | 952.8 | 1010.0 | 1046.2 | 1069.4 | 1023.4 | 972.3 | 915.8 | 847.5 | 785.0 | 735.0 |
| 46° | 831.7 | 900.3 | 953.6 | 992.2 | 1016.1 | 969.8 | 918.6 | 863.4 | 799.6 | 737.8 | 691.5 |
| 46.5° | 781.3 | 848.3 | 897.5 | 938.5 | 964.5 | 917.0 | 864.6 | 812.6 | 750.8 | 694.4 | 649.7 |
| 47° | 732.1 | 796.7 | 843.9 | 884.5 | 912.9 | 865.4 | 812.6 | 761.0 | 703.7 | 649.3 | 608.6 |
| 47.5° | 684.2 | 745.9 | 792.3 | 832.1 | 861.7 | 815.0 | 761.8 | 712.2 | 658.2 | 607.8 | 570.0 |
| 48° | 637.5 | 696.8 | 741.5 | 780.5 | 811.4 | 767.5 | 712.6 | 663.1 | 614.3 | 567.2 | 533.1 |
| 48.5° | 592.8 | 649.3 | 691.5 | 730.5 | 761.8 | 721.6 | 665.5 | 616.3 | 571.2 | 529.4 | 498.1 |
| 49° | 548.9 | 602.5 | 644.4 | 681.3 | 712.6 | 675.7 | 619.2 | 570.4 | 528.2 | 491.6 | 464.4 |
| 49.5° | 506.6 | 557.0 | 598.1 | 633.8 | 663.9 | 631.4 | 576.5 | 527.0 | 486.7 | 455.9 | 431.1 |
| 50° | 466.8 | 511.9 | 553.4 | 585.9 | 618.0 | 587.1 | 534.3 | 485.5 | 446.5 | 422.1 | 400.6 |
| 50.5° | 427.4 | 468.0 | 509.5 | 540.4 | 572.9 | 545.2 | 494.5 | 446.1 | 408.7 | 392.5 | 372.6 |
| 51° | 390.4 | 427.4 | 468.9 | 496.5 | 529.0 | 504.2 | 456.7 | 409.1 | 375.8 | 363.2 | 344.5 |
| 51.5° | 353.9 | 388.8 | 429.0 | 455.0 | 488.0 | 465.2 | 420.5 | 377.8 | 343.3 | 333.6 | 316.9 |
| 52° | 319.8 | 352.7 | 391.7 | 415.6 | 448.1 | 427.0 | 390.4 | 346.6 | 310.4 | 304.3 | 288.9 |
| 52.5° | 287.2 | 317.7 | 355.1 | 377.0 | 409.5 | 394.5 | 360.0 | 314.9 | 277.9 | 275.1 | 262.9 |
| 53° | 257.2 | 286.0 | 321.4 | 340.9 | 375.0 | 361.6 | 329.5 | 283.6 | 252.3 | 249.9 | 239.7 |
| 53.5° | 228.7 | 256.8 | 288.5 | 307.2 | 340.5 | 329.1 | 299.0 | 257.2 | 229.1 | 227.1 | 217.0 |
| 54° | 203.6 | 229.6 | 258.8 | 276.3 | 305.5 | 296.2 | 268.6 | 233.2 | 208.4 | 205.6 | 196.2 |
| 54.5° | 180.4 | 204.0 | 229.6 | 247.0 | 271.4 | 263.7 | 243.8 | 211.3 | 189.7 | 184.9 | 175.1 |
| 55° | 159.3 | 181.2 | 203.6 | 220.6 | 242.1 | 238.5 | 220.2 | 191.8 | 172.3 | 166.2 | 156.0 |
| 55.5° | 139.0 | 158.9 | 178.8 | 195.8 | 215.7 | 212.5 | 197.9 | 172.3 | 155.2 | 147.5 | 137.3 |
| 56° | 123.1 | 138.5 | 156.8 | 172.7 | 191.4 | 189.7 | 176.3 | 154.8 | 139.0 | 130.4 | 120.3 |
| 56.5° | 106.9 | 122.3 | 137.7 | 150.7 | 169.0 | 167.8 | 156.0 | 138.1 | 123.5 | 114.2 | 104.0 |
| 57° | 91.0 | 106.4 | 121.1 | 133.3 | 148.3 | 147.5 | 137.3 | 121.9 | 108.5 | 99.1 | 89.4 |
| 57.5° | 75.2 | 90.2 | 104.0 | 116.2 | 128.4 | 128.0 | 119.4 | 106.4 | 94.7 | 85.3 | 75.6 |
| 58° | 60.1 | 73.9 | 87.4 | 98.7 | 110.5 | 110.1 | 103.2 | 92.2 | 81.3 | 71.1 | 60.5 |
| 58.5° | 45.5 | 58.1 | 70.7 | 81.7 | 94.3 | 93.9 | 88.2 | 78.4 | 67.0 | 60.5 | 51.6 |
| 59° | 33.3 | 43.9 | 54.8 | 64.6 | 78.4 | 79.2 | 73.1 | 63.4 | 56.9 | 50.0 | 42.3 |
| 59.5° | 24.4 | 32.1 | 40.2 | 48.3 | 66.2 | 68.3 | 61.8 | 53.6 | 46.7 | 39.0 | 33.3 |
| 60° | 18.3 | 23.2 | 29.3 | 35.3 | 54.0 | 57.3 | 50.8 | 43.9 | 36.2 | 28.4 | 24.4 |
| 60.5° | 13.4 | 17.5 | 21.1 | 25.2 | 41.8 | 46.3 | 39.4 | 34.1 | 26.0 | 17.9 | 15.0 |
| 61° | 11.4 | 15.0 | 15.8 | 18.7 | 29.7 | 35.3 | 28.0 | 24.4 | 16.3 | 13.8 | 11.8 |
| 61.5° | 9.3 | 12.6 | 13.4 | 13.8 | 17.5 | 24.4 | 17.1 | 14.6 | 12.2 | 11.0 | 9.3 |
| 62° | 7.3 | 10.2 | 11.0 | 11.8 | 13.0 | 13.4 | 13.0 | 11.0 | 9.3 | 8.5 | 7.7 |
| 62.5° | 5.3 | 7.7 | 8.5 | 9.8 | 10.2 | 10.2 | 9.8 | 8.9 | 7.3 | 6.9 | 6.1 |
| 63° | 4.5 | 5.7 | 6.5 | 7.7 | 8.1 | 8.1 | 7.7 | 6.9 | 6.1 | 5.7 | 5.3 |
| 63.5° | 3.7 | 4.5 | 5.3 | 5.7 | 6.5 | 6.5 | 6.1 | 5.7 | 4.9 | 4.9 | 4.5 |
| 64° | 2.8 | 3.7 | 4.5 | 4.9 | 5.3 | 5.3 | 5.3 | 4.9 | 4.1 | 4.1 | 3.7 |
| 64.5° | 2.4 | 3.3 | 3.7 | 4.1 | 4.5 | 4.5 | 4.1 | 4.1 | 3.3 | 3.3 | 3.3 |
| 65° | 2.0 | 2.8 | 3.3 | 3.3 | 3.7 | 3.7 | 3.7 | 3.3 | 2.8 | 2.8 | 2.8 |
| 65.5° | 2.0 | 2.4 | 2.4 | 2.8 | 3.3 | 2.8 | 2.8 | 2.8 | 2.4 | 2.4 | 2.4 |
| 66° | 1.6 | 2.0 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.0 | 2.0 | 2.0 |



TEST NUMBER: P776727

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-5000lm-3500K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|-----|-------|-----|-------|-----|--------|------|--------|------|--------|------|
| 67.5° | 1.2 | 1.2 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.2 | 1.2 | 1.2 |
| 68° | 0.8 | 1.2 | 1.2 | 1.2 | 1.6 | 1.2 | 1.6 | 1.2 | 1.2 | 1.2 | 1.2 |
| 68.5° | 0.8 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 69° | 0.8 | 0.8 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 0.8 | 0.8 | 0.8 |
| 69.5° | 0.8 | 0.8 | 0.8 | 0.8 | 1.2 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| 70° | 0.4 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| 70.5° | 0.4 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| 71° | 0.4 | 0.4 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| 71.5° | 0.4 | 0.4 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.4 | 0.4 | 0.4 |
| 72° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 72.5° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 73° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 73.5° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 74° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 74.5° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 75° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 75.5° | 0.0 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 76° | 0.0 | 0.0 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 76.5° | 0.0 | 0.0 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.0 | 0.0 | 0.4 |
| 77° | 0.0 | 0.0 | 0.0 | 0.4 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 78° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 78.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 79° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 79.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 81° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 81.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 83° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 83.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 84° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 84.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 86° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 86.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 88° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 88.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P776727

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-5000lm-3500K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-----|-----|-------|-----|-------|-----|--------|------|--------|------|--------|------|
| 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: P776727

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-5000lm-3500K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|--------|--------|--------|--------|--------|
| 0° | 3707.0 | 3707.0 | 3707.0 | 3707.0 | 3707.0 | 3707.0 |
| 0.5° | 3705.8 | 3701.3 | 3703.7 | 3705.8 | 3707.0 | 3706.2 |
| 1° | 3701.7 | 3696.4 | 3699.3 | 3702.5 | 3704.6 | 3705.4 |
| 1.5° | 3696.4 | 3690.7 | 3694.4 | 3698.1 | 3702.5 | 3704.1 |
| 2° | 3689.9 | 3683.8 | 3687.9 | 3693.2 | 3698.1 | 3702.1 |
| 2.5° | 3683.0 | 3676.1 | 3680.2 | 3687.5 | 3694.0 | 3702.1 |
| 3° | 3674.9 | 3667.2 | 3672.5 | 3680.2 | 3689.9 | 3696.0 |
| 3.5° | 3666.0 | 3657.4 | 3663.1 | 3673.3 | 3684.2 | 3692.4 |
| 4° | 3656.6 | 3647.3 | 3653.4 | 3665.1 | 3678.6 | 3687.9 |
| 4.5° | 3646.0 | 3635.5 | 3642.8 | 3656.2 | 3671.2 | 3682.2 |
| 5° | 3634.3 | 3622.9 | 3631.0 | 3646.0 | 3663.5 | 3676.5 |
| 5.5° | 3621.7 | 3610.3 | 3618.4 | 3635.5 | 3654.6 | 3671.2 |
| 6° | 3608.3 | 3596.5 | 3605.8 | 3624.5 | 3645.6 | 3661.9 |
| 6.5° | 3594.0 | 3581.0 | 3591.6 | 3611.9 | 3635.5 | 3653.8 |
| 7° | 3579.4 | 3566.4 | 3577.0 | 3598.9 | 3624.9 | 3644.4 |
| 7.5° | 3563.6 | 3549.8 | 3561.5 | 3585.9 | 3613.1 | 3633.9 |
| 8° | 3547.7 | 3532.3 | 3545.7 | 3571.3 | 3600.5 | 3622.5 |
| 8.5° | 3530.7 | 3514.4 | 3528.6 | 3555.9 | 3586.3 | 3610.7 |
| 9° | 3513.6 | 3496.5 | 3510.8 | 3540.0 | 3572.1 | 3597.7 |
| 9.5° | 3494.5 | 3477.4 | 3492.9 | 3522.9 | 3556.7 | 3583.5 |
| 10° | 3475.8 | 3458.3 | 3473.8 | 3505.9 | 3540.8 | 3568.9 |
| 10.5° | 3455.9 | 3437.2 | 3454.7 | 3487.6 | 3524.2 | 3553.0 |
| 11° | 3435.6 | 3416.1 | 3434.4 | 3468.1 | 3506.7 | 3536.8 |
| 11.5° | 3414.9 | 3395.0 | 3413.2 | 3448.2 | 3488.4 | 3519.7 |
| 12° | 3392.9 | 3372.2 | 3391.7 | 3427.9 | 3468.9 | 3500.6 |
| 12.5° | 3371.0 | 3349.9 | 3369.8 | 3406.3 | 3449.0 | 3481.9 |
| 13° | 3347.8 | 3326.3 | 3346.6 | 3384.8 | 3429.1 | 3462.8 |
| 13.5° | 3324.3 | 3302.3 | 3322.6 | 3362.1 | 3407.6 | 3442.1 |
| 14° | 3299.5 | 3277.9 | 3298.3 | 3339.7 | 3386.0 | 3421.8 |
| 14.5° | 3274.3 | 3252.8 | 3273.5 | 3316.1 | 3363.3 | 3399.8 |
| 15° | 3248.3 | 3226.8 | 3247.9 | 3291.8 | 3341.3 | 3377.5 |
| 15.5° | 3223.1 | 3199.5 | 3221.5 | 3266.6 | 3316.5 | 3354.3 |
| 16° | 3195.9 | 3173.1 | 3195.1 | 3241.8 | 3292.6 | 3330.8 |
| 16.5° | 3168.7 | 3144.7 | 3167.4 | 3216.6 | 3268.2 | 3306.4 |
| 17° | 3140.2 | 3117.1 | 3139.8 | 3190.2 | 3243.0 | 3281.6 |
| 17.5° | 3112.6 | 3087.8 | 3111.4 | 3162.2 | 3215.8 | 3255.6 |
| 18° | 3084.1 | 3058.1 | 3082.9 | 3134.5 | 3189.0 | 3230.0 |
| 18.5° | 3054.5 | 3028.1 | 3054.1 | 3106.1 | 3161.8 | 3203.6 |
| 19° | 3025.2 | 2998.8 | 3023.6 | 3076.8 | 3133.3 | 3176.4 |
| 19.5° | 2995.6 | 2968.4 | 2994.4 | 3048.0 | 3104.9 | 3148.7 |
| 20° | 2965.9 | 2936.7 | 2964.7 | 3017.5 | 3075.6 | 3121.1 |
| 20.5° | 2936.7 | 2905.8 | 2934.2 | 2986.6 | 3045.1 | 3092.3 |
| 21° | 2905.0 | 2874.5 | 2903.4 | 2955.8 | 3014.7 | 3063.4 |



TEST NUMBER: P776727

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-5000lm-3500K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|--------|--------|--------|--------|--------|
| 22.5° | 2807.9 | 2779.4 | 2807.9 | 2857.8 | 2919.2 | 2974.5 |
| 23° | 2774.6 | 2746.5 | 2774.6 | 2824.5 | 2886.3 | 2944.0 |
| 23.5° | 2741.6 | 2714.0 | 2742.9 | 2791.2 | 2853.0 | 2913.1 |
| 24° | 2707.5 | 2680.7 | 2708.7 | 2757.1 | 2818.8 | 2881.0 |
| 24.5° | 2673.4 | 2647.4 | 2675.8 | 2722.1 | 2785.5 | 2848.5 |
| 25° | 2639.3 | 2612.9 | 2641.3 | 2687.2 | 2751.4 | 2815.6 |
| 25.5° | 2604.3 | 2578.7 | 2607.2 | 2652.3 | 2716.5 | 2782.7 |
| 26° | 2570.2 | 2544.2 | 2571.0 | 2615.3 | 2681.9 | 2749.8 |
| 26.5° | 2534.4 | 2508.4 | 2534.4 | 2579.9 | 2646.6 | 2714.8 |
| 27° | 2497.9 | 2471.9 | 2497.5 | 2541.3 | 2610.8 | 2680.7 |
| 27.5° | 2460.5 | 2435.3 | 2459.3 | 2503.6 | 2574.3 | 2644.9 |
| 28° | 2422.3 | 2395.1 | 2419.1 | 2465.0 | 2536.9 | 2609.6 |
| 28.5° | 2382.5 | 2355.3 | 2380.9 | 2426.0 | 2499.1 | 2573.4 |
| 29° | 2342.7 | 2314.2 | 2339.8 | 2386.5 | 2460.9 | 2536.5 |
| 29.5° | 2302.0 | 2272.8 | 2298.0 | 2345.5 | 2421.9 | 2498.7 |
| 30° | 2259.8 | 2229.3 | 2255.3 | 2304.9 | 2382.9 | 2460.5 |
| 30.5° | 2216.7 | 2183.0 | 2212.3 | 2263.0 | 2341.9 | 2421.5 |
| 31° | 2172.8 | 2136.7 | 2166.7 | 2221.2 | 2300.8 | 2381.7 |
| 31.5° | 2128.1 | 2089.6 | 2121.2 | 2179.7 | 2259.4 | 2340.6 |
| 32° | 2083.1 | 2041.2 | 2073.7 | 2135.1 | 2217.5 | 2298.0 |
| 32.5° | 2035.9 | 1993.3 | 2026.6 | 2092.4 | 2174.9 | 2256.1 |
| 33° | 1988.0 | 1943.3 | 1978.2 | 2048.5 | 2130.2 | 2212.3 |
| 33.5° | 1939.2 | 1894.1 | 1929.9 | 2004.2 | 2085.9 | 2167.2 |
| 34° | 1890.1 | 1845.0 | 1881.9 | 1958.3 | 2040.0 | 2119.6 |
| 34.5° | 1839.7 | 1795.4 | 1832.8 | 1910.0 | 1994.1 | 2071.3 |
| 35° | 1790.1 | 1746.6 | 1782.8 | 1861.6 | 1945.3 | 2020.9 |
| 35.5° | 1740.1 | 1697.5 | 1734.9 | 1812.1 | 1897.0 | 1970.5 |
| 36° | 1688.9 | 1649.1 | 1686.1 | 1761.7 | 1844.6 | 1916.5 |
| 36.5° | 1638.2 | 1600.0 | 1636.9 | 1710.1 | 1791.3 | 1862.4 |
| 37° | 1586.6 | 1550.0 | 1587.0 | 1653.2 | 1736.5 | 1806.8 |
| 37.5° | 1534.6 | 1498.8 | 1536.2 | 1600.0 | 1682.9 | 1751.5 |
| 38° | 1482.1 | 1448.4 | 1483.8 | 1543.5 | 1624.3 | 1694.2 |
| 38.5° | 1428.1 | 1393.2 | 1429.3 | 1489.1 | 1566.7 | 1639.8 |
| 39° | 1375.7 | 1337.9 | 1374.9 | 1457.8 | 1506.9 | 1582.9 |
| 39.5° | 1322.1 | 1282.3 | 1320.4 | 1394.4 | 1439.5 | 1528.1 |
| 40° | 1268.0 | 1227.0 | 1265.6 | 1330.6 | 1383.4 | 1473.2 |
| 40.5° | 1214.4 | 1173.8 | 1211.2 | 1267.2 | 1327.4 | 1418.8 |
| 41° | 1161.2 | 1122.6 | 1154.3 | 1203.8 | 1271.7 | 1363.5 |
| 41.5° | 1110.4 | 1071.8 | 1099.4 | 1147.8 | 1215.6 | 1309.1 |
| 42° | 1056.8 | 1022.6 | 1045.8 | 1091.3 | 1159.1 | 1254.2 |
| 42.5° | 1005.2 | 972.7 | 994.2 | 1035.6 | 1103.9 | 1199.4 |
| 43° | 954.4 | 923.5 | 943.0 | 980.4 | 1047.4 | 1143.7 |
| 43.5° | 902.8 | 873.9 | 890.6 | 926.3 | 993.0 | 1089.3 |



TEST NUMBER: P776727

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-5000lm-3500K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|-------|--------|-------|--------|-------|
| 45° | 759.4 | 728.1 | 739.9 | 769.9 | 839.0 | 932.4 |
| 45.5° | 713.4 | 682.6 | 690.3 | 721.2 | 791.5 | 882.9 |
| 46° | 668.8 | 637.9 | 643.2 | 674.4 | 744.3 | 831.7 |
| 46.5° | 627.3 | 592.8 | 596.8 | 629.3 | 699.6 | 781.3 |
| 47° | 584.2 | 550.1 | 553.0 | 585.5 | 654.1 | 732.1 |
| 47.5° | 544.8 | 508.3 | 511.1 | 544.0 | 611.9 | 684.2 |
| 48° | 507.1 | 468.0 | 470.5 | 504.2 | 568.8 | 637.5 |
| 48.5° | 470.5 | 428.6 | 432.7 | 466.4 | 527.8 | 592.8 |
| 49° | 435.9 | 392.5 | 396.5 | 430.7 | 487.1 | 548.9 |
| 49.5° | 403.0 | 357.5 | 362.4 | 396.1 | 449.4 | 506.6 |
| 50° | 373.8 | 325.0 | 331.5 | 364.0 | 411.6 | 466.8 |
| 50.5° | 344.9 | 295.8 | 301.9 | 333.2 | 376.6 | 427.4 |
| 51° | 315.7 | 269.4 | 275.5 | 304.7 | 343.7 | 390.4 |
| 51.5° | 286.8 | 245.4 | 250.7 | 277.1 | 312.4 | 353.9 |
| 52° | 262.1 | 223.9 | 228.3 | 252.3 | 283.2 | 319.8 |
| 52.5° | 238.1 | 204.4 | 207.2 | 228.7 | 255.6 | 287.2 |
| 53° | 215.3 | 185.7 | 188.5 | 206.0 | 229.1 | 257.2 |
| 53.5° | 195.0 | 168.6 | 170.2 | 184.5 | 204.8 | 228.7 |
| 54° | 175.5 | 152.4 | 153.2 | 165.0 | 182.4 | 203.6 |
| 54.5° | 156.8 | 137.7 | 138.5 | 146.3 | 161.7 | 180.4 |
| 55° | 139.8 | 123.5 | 123.9 | 130.8 | 141.0 | 159.3 |
| 55.5° | 122.7 | 109.3 | 109.7 | 115.4 | 125.1 | 139.0 |
| 56° | 107.3 | 95.1 | 95.1 | 99.9 | 109.3 | 123.1 |
| 56.5° | 93.0 | 80.9 | 80.4 | 84.9 | 93.4 | 106.9 |
| 57° | 79.6 | 66.2 | 65.8 | 69.5 | 77.6 | 91.0 |
| 57.5° | 65.0 | 51.6 | 51.6 | 54.4 | 62.6 | 75.2 |
| 58° | 55.3 | 39.4 | 39.0 | 41.4 | 47.9 | 60.1 |
| 58.5° | 45.5 | 29.7 | 28.8 | 30.5 | 35.8 | 45.5 |
| 59° | 35.8 | 21.9 | 21.5 | 22.8 | 26.4 | 33.3 |
| 59.5° | 26.0 | 16.7 | 16.3 | 17.1 | 19.5 | 24.4 |
| 60° | 16.3 | 14.2 | 13.8 | 14.6 | 14.6 | 18.3 |
| 60.5° | 12.6 | 11.4 | 11.4 | 12.2 | 12.6 | 13.4 |
| 61° | 10.2 | 8.9 | 8.5 | 10.2 | 10.2 | 11.4 |
| 61.5° | 8.1 | 6.5 | 6.1 | 7.7 | 8.1 | 9.3 |
| 62° | 6.5 | 5.3 | 5.3 | 5.3 | 6.1 | 7.3 |
| 62.5° | 5.3 | 4.5 | 4.1 | 4.5 | 4.9 | 5.3 |
| 63° | 4.5 | 3.7 | 3.7 | 3.7 | 4.1 | 4.5 |
| 63.5° | 3.7 | 3.3 | 2.8 | 2.8 | 3.3 | 3.7 |
| 64° | 3.3 | 2.8 | 2.4 | 2.4 | 2.8 | 2.8 |
| 64.5° | 2.8 | 2.4 | 2.0 | 2.0 | 2.4 | 2.4 |
| 65° | 2.4 | 2.0 | 1.6 | 2.0 | 2.0 | 2.0 |
| 65.5° | 2.0 | 1.6 | 1.6 | 1.6 | 1.6 | 2.0 |
| 66° | 1.6 | 1.6 | 1.2 | 1.2 | 1.6 | 1.6 |



TEST NUMBER: P776727

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-5000lm-3500K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|------|--------|------|--------|------|
| 67.5° | 1.2 | 1.2 | 0.8 | 0.8 | 1.2 | 1.2 |
| 68° | 1.2 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| 68.5° | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| 69° | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| 69.5° | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| 70° | 0.8 | 0.8 | 0.4 | 0.4 | 0.4 | 0.4 |
| 70.5° | 0.8 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 71° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 71.5° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 72° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 72.5° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 73° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 73.5° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 74° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 74.5° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 75° | 0.4 | 0.4 | 0.4 | 0.0 | 0.0 | 0.4 |
| 75.5° | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 76° | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 76.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 78° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 78.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 79° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 79.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 81° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 81.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 83° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 83.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 84° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 84.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 86° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 86.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 88° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 88.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P776727

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-5000lm-3500K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-----|--------|------|--------|------|--------|------|
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



Report Generated By 670245859 / DESKTOP-T8S5UU9

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270° - · - 135°-315°

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Peachtree City, GA 30269

Scaled Data Report



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Peachtree City, GA 30269

Scaled Data Report





| | | | | | | | | | | | |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 21.5° | 3033.8 | 3082.5 | 3122.3 | 3131.7 | 3122.7 | 3101.6 | 3057.3 | 2998.4 | 2952.1 | 2919.6 | 2894.0 |
| 22° | 3004.5 | 3053.3 | 3093.1 | 3102.8 | 3095.1 | 3073.6 | 3027.7 | 2969.2 | 2920.0 | 2887.1 | 2860.7 |



| | | | | | | | | | | | |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| 44° | 1035.2 | 1114.5 | 1182.7 | 1211.6 | 1235.9 | 1191.2 | 1138.8 | 1073.4 | 994.6 | 930.4 | 873.5 |
| 44.5° | 983.2 | 1060.8 | 1124.6 | 1155.9 | 1179.9 | 1135.6 | 1084.0 | 1019.8 | 947.1 | 882.1 | 827.2 |



| | | | | | | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 66.5° | 1.2 | 1.6 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.6 | 1.6 | 1.6 |
| 67° | 1.2 | 1.6 | 1.6 | 1.6 | 2.0 | 2.0 | 2.0 | 1.6 | 1.6 | 1.6 | 1.6 |



| | | | | | | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 89° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 89.5° | 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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Peachtree City, GA 30269

Scaled Data Report





| | | | | | | |
|-------|--------|--------|--------|--------|--------|--------|
| 21.5° | 2872.5 | 2843.2 | 2871.7 | 2923.3 | 2983.0 | 3033.8 |
| 22° | 2840.4 | 2811.1 | 2840.0 | 2891.2 | 2951.3 | 3004.5 |



| | | | | | | |
|-------|-------|-------|-------|-------|-------|--------|
| 44° | 854.0 | 824.0 | 839.4 | 873.1 | 941.0 | 1035.2 |
| 44.5° | 806.9 | 775.2 | 789.8 | 821.1 | 889.8 | 983.2 |

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Peachtree City, GA 30269

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| | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|
| 66.5° | 1.6 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 67° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |

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Scaled Data Report



| | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|
| 89° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 89.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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(END OF REPORT)