

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: P776393

Luminaire Tested: HCDJBL3040CSD-HCD6TRH-4000lm-4000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776393
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: HCDJBL3040CSD-HCD6TRH-4000lm-4000K
Description: 6 INCH ROUND MEDIUM HAZE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT
Ballast/Driver: -

Summary

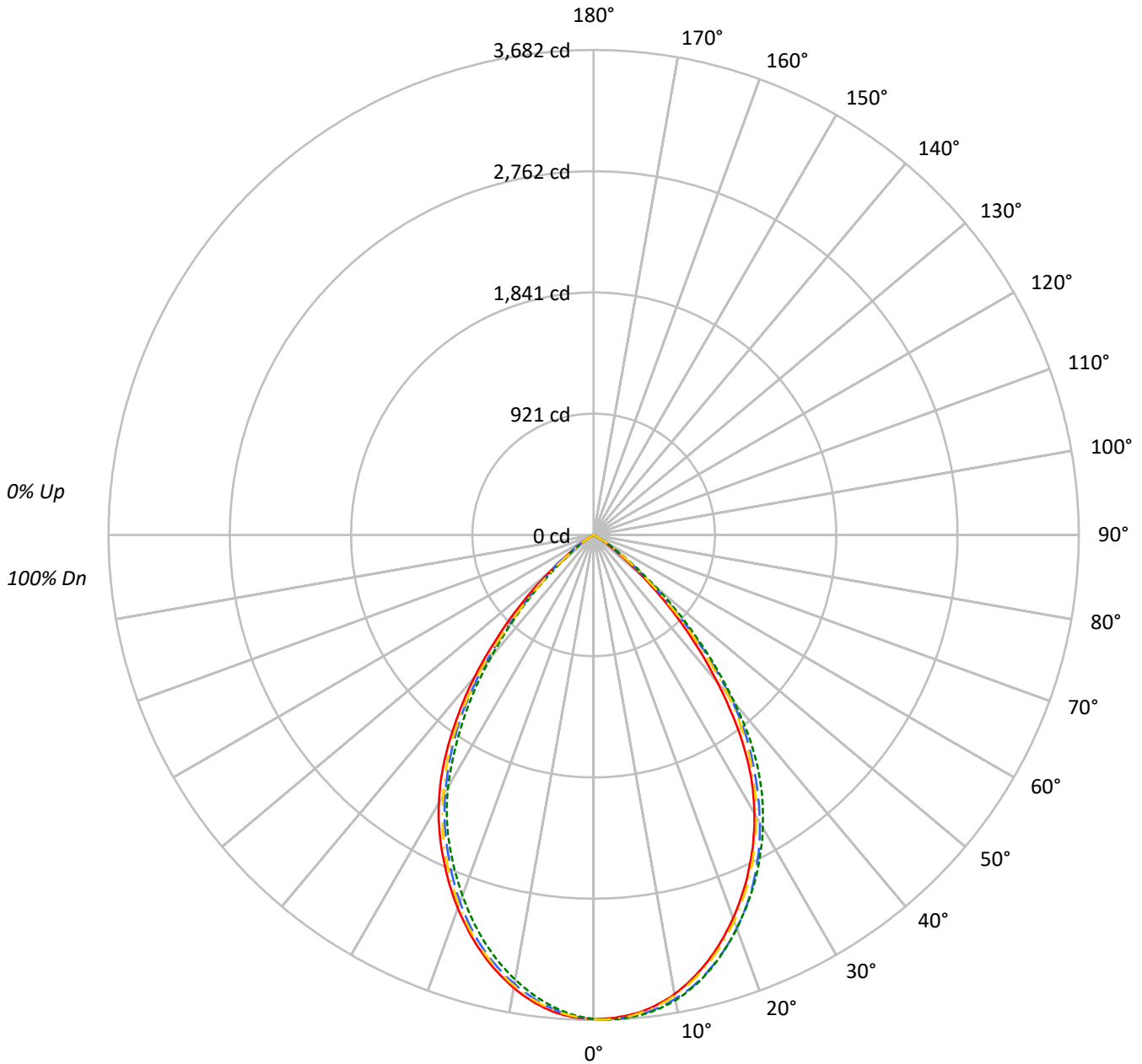
Lumens per Lamp: N/A
Luminaire Lumens: 4623.1 lumens
Efficiency: N/A
Efficacy: 120.1 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.02 / 1.06
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 38.5
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: P776393
CATALOG NUMBER: HCDJBL3040CSD-HCD6TRH-4000lm-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P776393

CATALOG NUMBER: HCDJBL3040CSD-HCD6TRH-4000lm-4000K

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° | 201524 | 201524 | 201524 | 201524 |
| 5° | 200632 | 201848 | 199724 | 197705 |
| 10° | 197007 | 199612 | 194385 | 190906 |
| 15° | 190086 | 193951 | 186272 | 181607 |
| 20° | 180563 | 185405 | 175884 | 169893 |
| 25° | 168887 | 175226 | 163479 | 156729 |
| 30° | 154454 | 162487 | 148789 | 139939 |
| 35° | 134114 | 145712 | 127455 | 115917 |
| 40° | 104546 | 119109 | 100481 | 87077 |
| 45° | 71690 | 86459 | 68937 | 55975 |
| 50° | 39478 | 52263 | 37764 | 27487 |
| 55° | 15091 | 22948 | 16324 | 11708 |
| 60° | 1984 | 5877 | 3936 | 1546 |
| 65° | 259 | 467 | 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: 86459 cd/sqm



TEST NUMBER: P776393

CATALOG NUMBER: HCDJBL3040CSD-HCD6TRH-4000lm-4000K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 343.2 | 7.4 |
| 10°-20° | 930.4 | 20.1 |
| 20°-30° | 1258.5 | 27.2 |
| 30°-40° | 1208.3 | 26.1 |
| 40°-50° | 703.7 | 15.2 |
| 50°-60° | 173.2 | 3.7 |
| 60°-70° | 5.5 | 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° | 2532.1 | 54.8 |
| 0°-40° | 3740.4 | 80.9 |
| 0°-60° | 4617.2 | 99.9 |
| 0°-90° | 4623.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4623.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 3676 | 3676 | 3676 | 3676 | 3676 | |
| 5° | 3646 | 3668 | 3629 | 3593 | 3646 | 345 |
| 15° | 3349 | 3417 | 3282 | 3200 | 3349 | 939 |
| 25° | 2792 | 2897 | 2703 | 2591 | 2792 | 1279 |
| 35° | 2004 | 2177 | 1904 | 1732 | 2004 | 1233 |
| 45° | 925 | 1115 | 889 | 722 | 925 | 714 |
| 55° | 158 | 240 | 171 | 122 | 158 | 163 |
| 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: P776393

CATALOG NUMBER: HCDJBL3040CSD-HCD6TRH-4000lm-4000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3676.1 | 3676.1 | 3676.1 | 3676.1 | 3676.1 | 3676.1 | 3676.1 | 3676.1 | 3676.1 | 3676.1 | 3676.1 |
| 0.5° | 3675.3 | 3675.7 | 3678.5 | 3680.9 | 3677.3 | 3678.9 | 3679.7 | 3678.1 | 3674.5 | 3672.9 | 3673.3 |
| 1° | 3674.5 | 3676.1 | 3680.1 | 3683.0 | 3679.7 | 3680.5 | 3680.5 | 3677.7 | 3672.9 | 3669.7 | 3670.1 |
| 1.5° | 3673.3 | 3676.1 | 3680.5 | 3684.2 | 3680.9 | 3681.7 | 3680.1 | 3676.5 | 3671.3 | 3666.4 | 3665.6 |
| 2° | 3671.3 | 3675.7 | 3680.5 | 3684.2 | 3681.7 | 3681.7 | 3679.7 | 3674.5 | 3667.2 | 3662.4 | 3660.4 |
| 2.5° | 3671.3 | 3674.1 | 3679.3 | 3683.4 | 3680.9 | 3680.5 | 3677.7 | 3671.7 | 3664.0 | 3657.2 | 3653.9 |
| 3° | 3665.2 | 3671.7 | 3678.1 | 3682.1 | 3680.1 | 3679.3 | 3674.9 | 3667.2 | 3658.4 | 3651.1 | 3646.7 |
| 3.5° | 3661.6 | 3668.9 | 3675.7 | 3680.1 | 3678.1 | 3676.1 | 3671.3 | 3662.8 | 3652.7 | 3644.3 | 3639.8 |
| 4° | 3657.2 | 3665.6 | 3672.5 | 3677.3 | 3675.3 | 3673.3 | 3667.2 | 3656.8 | 3646.3 | 3637.0 | 3630.2 |
| 4.5° | 3651.5 | 3661.6 | 3668.4 | 3673.7 | 3672.1 | 3669.3 | 3661.6 | 3650.3 | 3639.0 | 3627.8 | 3620.9 |
| 5° | 3645.9 | 3656.4 | 3664.0 | 3669.7 | 3668.0 | 3664.4 | 3655.6 | 3643.1 | 3629.4 | 3618.1 | 3610.4 |
| 5.5° | 3640.6 | 3650.3 | 3659.2 | 3664.4 | 3663.6 | 3659.2 | 3648.3 | 3634.6 | 3619.3 | 3607.6 | 3598.7 |
| 6° | 3631.4 | 3643.5 | 3653.1 | 3658.8 | 3658.4 | 3652.7 | 3640.2 | 3624.5 | 3608.8 | 3596.3 | 3586.7 |
| 6.5° | 3623.3 | 3636.6 | 3646.3 | 3652.7 | 3651.9 | 3645.5 | 3632.6 | 3613.7 | 3597.1 | 3584.2 | 3573.0 |
| 7° | 3614.1 | 3628.2 | 3638.2 | 3645.9 | 3645.1 | 3638.2 | 3622.5 | 3602.8 | 3585.0 | 3570.9 | 3560.1 |
| 7.5° | 3603.6 | 3618.9 | 3629.8 | 3637.4 | 3637.0 | 3629.8 | 3612.4 | 3589.9 | 3570.9 | 3556.4 | 3544.8 |
| 8° | 3592.3 | 3608.8 | 3620.9 | 3628.2 | 3628.6 | 3620.9 | 3601.6 | 3577.0 | 3556.8 | 3541.5 | 3529.8 |
| 8.5° | 3580.6 | 3597.9 | 3610.8 | 3618.5 | 3619.3 | 3610.4 | 3589.5 | 3563.3 | 3541.9 | 3526.2 | 3513.3 |
| 9° | 3567.7 | 3585.9 | 3600.4 | 3608.0 | 3608.8 | 3599.6 | 3577.4 | 3548.8 | 3525.8 | 3510.1 | 3497.6 |
| 9.5° | 3553.6 | 3573.8 | 3588.3 | 3596.7 | 3597.9 | 3588.3 | 3563.3 | 3533.1 | 3510.1 | 3492.8 | 3479.9 |
| 10° | 3539.1 | 3560.5 | 3576.6 | 3584.6 | 3585.9 | 3575.4 | 3549.2 | 3517.4 | 3492.0 | 3475.5 | 3461.8 |
| 10.5° | 3523.4 | 3546.0 | 3563.3 | 3571.8 | 3572.6 | 3562.1 | 3534.3 | 3500.0 | 3474.2 | 3457.3 | 3443.2 |
| 11° | 3507.3 | 3531.5 | 3550.4 | 3558.1 | 3558.9 | 3547.2 | 3518.6 | 3482.7 | 3455.3 | 3438.4 | 3424.3 |
| 11.5° | 3490.4 | 3515.7 | 3535.1 | 3543.1 | 3543.9 | 3532.3 | 3502.5 | 3464.6 | 3435.2 | 3419.0 | 3404.5 |
| 12° | 3471.4 | 3499.2 | 3520.6 | 3527.4 | 3528.2 | 3515.7 | 3484.7 | 3445.6 | 3415.4 | 3398.9 | 3384.0 |
| 12.5° | 3452.9 | 3481.9 | 3503.7 | 3511.7 | 3511.7 | 3498.8 | 3466.6 | 3426.3 | 3394.9 | 3378.0 | 3363.4 |
| 13° | 3434.0 | 3464.6 | 3487.5 | 3495.6 | 3495.6 | 3481.5 | 3448.9 | 3406.6 | 3373.9 | 3356.6 | 3342.1 |
| 13.5° | 3413.4 | 3445.2 | 3469.8 | 3477.1 | 3476.3 | 3462.2 | 3428.7 | 3385.6 | 3351.4 | 3334.8 | 3319.9 |
| 14° | 3393.3 | 3426.3 | 3451.3 | 3458.9 | 3457.3 | 3443.2 | 3409.0 | 3364.3 | 3329.2 | 3311.9 | 3297.0 |
| 14.5° | 3371.5 | 3405.8 | 3431.9 | 3440.0 | 3436.8 | 3422.3 | 3388.4 | 3341.7 | 3306.2 | 3287.7 | 3273.6 |
| 15° | 3349.3 | 3385.6 | 3411.8 | 3420.3 | 3417.4 | 3401.7 | 3366.3 | 3319.1 | 3282.1 | 3263.1 | 3249.4 |
| 15.5° | 3326.4 | 3363.9 | 3391.2 | 3400.5 | 3395.7 | 3380.4 | 3343.7 | 3295.8 | 3257.5 | 3239.4 | 3224.4 |
| 16° | 3303.0 | 3341.3 | 3369.9 | 3378.4 | 3374.3 | 3358.2 | 3321.5 | 3272.0 | 3232.9 | 3214.0 | 3198.3 |
| 16.5° | 3278.8 | 3318.7 | 3347.3 | 3356.6 | 3351.8 | 3334.8 | 3297.8 | 3247.4 | 3207.5 | 3187.4 | 3171.7 |
| 17° | 3254.3 | 3295.4 | 3325.2 | 3334.4 | 3328.0 | 3311.5 | 3274.0 | 3222.4 | 3180.9 | 3160.0 | 3144.7 |
| 17.5° | 3228.5 | 3271.6 | 3301.8 | 3311.9 | 3304.6 | 3287.3 | 3249.0 | 3195.8 | 3154.7 | 3132.6 | 3116.1 |
| 18° | 3203.1 | 3246.6 | 3278.0 | 3287.7 | 3279.6 | 3262.7 | 3224.4 | 3170.1 | 3126.5 | 3104.4 | 3087.1 |
| 18.5° | 3176.9 | 3221.2 | 3253.1 | 3263.5 | 3254.7 | 3237.7 | 3198.3 | 3142.7 | 3099.1 | 3075.4 | 3058.4 |
| 19° | 3149.9 | 3195.4 | 3228.9 | 3239.0 | 3229.7 | 3212.4 | 3171.7 | 3115.3 | 3071.3 | 3047.2 | 3027.4 |
| 19.5° | 3122.5 | 3168.8 | 3202.7 | 3213.6 | 3204.3 | 3185.8 | 3144.7 | 3087.1 | 3043.9 | 3016.5 | 2996.4 |
| 20° | 3095.1 | 3142.3 | 3177.3 | 3187.8 | 3178.1 | 3158.4 | 3118.1 | 3059.7 | 3014.9 | 2986.3 | 2965.4 |
| 20.5° | 3066.5 | 3114.1 | 3150.7 | 3160.0 | 3150.3 | 3131.8 | 3089.9 | 3030.6 | 2985.5 | 2955.7 | 2934.4 |
| 21° | 3037.9 | 3085.8 | 3123.7 | 3133.4 | 3123.3 | 3104.0 | 3060.9 | 3002.0 | 2956.5 | 2925.5 | 2903.3 |



TEST NUMBER: P776393

CATALOG NUMBER: HCDJBL3040CSD-HCD6TRH-4000lm-4000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 22.5° | 2949.7 | 2998.0 | 3038.7 | 3048.0 | 3042.7 | 3017.4 | 2973.0 | 2915.8 | 2864.7 | 2830.4 | 2802.2 |
| 23° | 2919.4 | 2967.4 | 3008.9 | 3018.6 | 3014.1 | 2986.7 | 2944.0 | 2884.8 | 2832.0 | 2797.4 | 2768.4 |
| 23.5° | 2888.8 | 2936.0 | 2978.7 | 2988.3 | 2985.5 | 2956.1 | 2914.6 | 2853.8 | 2800.2 | 2763.5 | 2733.3 |
| 24° | 2857.0 | 2904.9 | 2946.8 | 2957.3 | 2956.9 | 2925.5 | 2883.2 | 2822.3 | 2767.6 | 2730.1 | 2698.7 |
| 24.5° | 2824.8 | 2873.1 | 2915.4 | 2926.3 | 2928.3 | 2899.7 | 2850.6 | 2790.5 | 2736.1 | 2696.2 | 2663.2 |
| 25° | 2792.1 | 2840.9 | 2883.2 | 2894.5 | 2896.9 | 2867.9 | 2817.5 | 2758.7 | 2702.7 | 2662.4 | 2629.0 |
| 25.5° | 2759.5 | 2806.6 | 2850.6 | 2861.4 | 2865.5 | 2835.2 | 2784.5 | 2725.7 | 2669.6 | 2627.7 | 2593.5 |
| 26° | 2726.9 | 2774.0 | 2816.7 | 2829.2 | 2834.4 | 2803.4 | 2751.0 | 2693.4 | 2636.6 | 2593.5 | 2558.4 |
| 26.5° | 2692.2 | 2740.6 | 2782.1 | 2795.8 | 2803.0 | 2769.6 | 2716.4 | 2660.0 | 2603.2 | 2558.8 | 2522.6 |
| 27° | 2658.4 | 2705.1 | 2747.8 | 2761.9 | 2771.2 | 2736.9 | 2682.5 | 2626.9 | 2568.1 | 2524.2 | 2487.1 |
| 27.5° | 2622.9 | 2669.2 | 2712.0 | 2727.7 | 2737.7 | 2702.7 | 2648.3 | 2593.1 | 2534.7 | 2488.7 | 2450.5 |
| 28° | 2587.9 | 2633.4 | 2674.9 | 2692.2 | 2704.3 | 2668.8 | 2613.6 | 2558.4 | 2499.6 | 2451.3 | 2412.6 |
| 28.5° | 2552.0 | 2597.1 | 2637.8 | 2656.8 | 2671.3 | 2634.2 | 2578.6 | 2524.2 | 2464.6 | 2413.4 | 2373.5 |
| 29° | 2515.3 | 2560.1 | 2599.9 | 2620.5 | 2637.4 | 2599.5 | 2542.3 | 2488.3 | 2427.9 | 2375.9 | 2334.4 |
| 29.5° | 2477.9 | 2521.4 | 2560.9 | 2583.8 | 2602.0 | 2564.9 | 2506.1 | 2450.9 | 2389.6 | 2336.8 | 2292.9 |
| 30° | 2440.0 | 2482.3 | 2521.8 | 2546.4 | 2566.9 | 2529.4 | 2469.0 | 2413.4 | 2350.5 | 2297.4 | 2251.8 |
| 30.5° | 2401.3 | 2442.8 | 2482.3 | 2506.9 | 2531.0 | 2492.8 | 2431.5 | 2374.3 | 2311.9 | 2255.9 | 2209.9 |
| 31° | 2361.8 | 2402.5 | 2440.4 | 2469.0 | 2496.0 | 2456.1 | 2392.9 | 2335.2 | 2270.4 | 2214.4 | 2167.2 |
| 31.5° | 2321.1 | 2361.4 | 2400.5 | 2429.1 | 2458.1 | 2419.0 | 2353.8 | 2294.9 | 2228.1 | 2172.5 | 2124.1 |
| 32° | 2278.8 | 2318.7 | 2358.2 | 2388.4 | 2420.7 | 2381.2 | 2314.7 | 2253.8 | 2184.5 | 2129.4 | 2079.8 |
| 32.5° | 2237.3 | 2278.0 | 2316.3 | 2346.9 | 2382.8 | 2342.1 | 2274.4 | 2211.9 | 2140.6 | 2085.4 | 2036.3 |
| 33° | 2193.8 | 2234.9 | 2274.8 | 2306.2 | 2344.1 | 2302.6 | 2233.7 | 2168.0 | 2095.5 | 2039.9 | 1992.8 |
| 33.5° | 2149.1 | 2191.8 | 2234.1 | 2264.7 | 2303.4 | 2262.7 | 2192.6 | 2123.7 | 2049.2 | 1994.4 | 1948.8 |
| 34° | 2102.0 | 2147.5 | 2191.0 | 2222.8 | 2263.5 | 2221.6 | 2150.7 | 2079.0 | 2002.4 | 1949.3 | 1904.1 |
| 34.5° | 2054.0 | 2104.0 | 2147.9 | 2180.5 | 2220.0 | 2178.5 | 2109.2 | 2033.1 | 1952.9 | 1900.9 | 1858.2 |
| 35° | 2004.0 | 2058.4 | 2104.0 | 2136.2 | 2177.3 | 2135.8 | 2066.5 | 1985.9 | 1904.5 | 1852.6 | 1812.7 |
| 35.5° | 1954.1 | 2012.9 | 2062.1 | 2092.3 | 2132.2 | 2092.7 | 2023.8 | 1939.2 | 1856.6 | 1804.6 | 1765.9 |
| 36° | 1900.5 | 1967.0 | 2016.1 | 2048.4 | 2087.0 | 2048.8 | 1979.9 | 1892.0 | 1808.2 | 1755.9 | 1717.6 |
| 36.5° | 1846.9 | 1918.2 | 1973.0 | 2004.5 | 2038.7 | 2003.2 | 1934.3 | 1844.1 | 1759.1 | 1706.3 | 1667.6 |
| 37° | 1791.7 | 1868.7 | 1927.1 | 1958.1 | 1989.5 | 1956.1 | 1887.6 | 1796.6 | 1708.3 | 1656.3 | 1615.2 |
| 37.5° | 1736.9 | 1817.1 | 1880.0 | 1910.6 | 1938.8 | 1907.8 | 1840.5 | 1747.4 | 1660.4 | 1605.6 | 1564.1 |
| 38° | 1680.1 | 1764.3 | 1830.8 | 1859.4 | 1886.4 | 1857.0 | 1791.3 | 1698.6 | 1610.0 | 1553.6 | 1510.1 |
| 38.5° | 1626.1 | 1711.5 | 1781.6 | 1811.5 | 1831.2 | 1805.8 | 1741.4 | 1649.5 | 1560.0 | 1501.2 | 1456.5 |
| 39° | 1569.7 | 1656.7 | 1729.7 | 1759.1 | 1776.8 | 1753.0 | 1689.4 | 1599.9 | 1508.9 | 1448.4 | 1402.9 |
| 39.5° | 1515.3 | 1601.9 | 1676.9 | 1706.7 | 1720.8 | 1698.2 | 1636.6 | 1548.8 | 1458.1 | 1395.3 | 1347.3 |
| 40° | 1460.9 | 1543.9 | 1621.7 | 1652.3 | 1664.4 | 1640.6 | 1582.6 | 1496.4 | 1404.1 | 1340.5 | 1291.7 |
| 40.5° | 1406.9 | 1487.5 | 1568.5 | 1596.7 | 1608.8 | 1583.0 | 1528.6 | 1444.0 | 1351.3 | 1286.5 | 1234.9 |
| 41° | 1352.1 | 1434.3 | 1514.1 | 1539.9 | 1553.2 | 1524.2 | 1470.6 | 1391.2 | 1297.4 | 1232.9 | 1178.5 |
| 41.5° | 1298.2 | 1379.1 | 1458.5 | 1483.5 | 1499.6 | 1466.2 | 1413.8 | 1339.3 | 1243.4 | 1181.7 | 1122.9 |
| 42° | 1243.8 | 1323.5 | 1401.3 | 1450.1 | 1444.8 | 1407.7 | 1356.2 | 1284.1 | 1189.0 | 1128.1 | 1068.1 |
| 42.5° | 1189.4 | 1268.3 | 1344.1 | 1388.8 | 1392.0 | 1349.7 | 1299.4 | 1229.7 | 1138.6 | 1076.2 | 1015.3 |
| 43° | 1134.2 | 1212.7 | 1286.9 | 1326.4 | 1338.4 | 1292.5 | 1243.0 | 1174.1 | 1086.6 | 1024.6 | 964.6 |
| 43.5° | 1080.2 | 1159.2 | 1230.1 | 1264.3 | 1281.6 | 1236.5 | 1186.6 | 1120.1 | 1037.9 | 973.8 | 914.6 |



TEST NUMBER: P776393

CATALOG NUMBER: HCDJBL3040CSD-HCD6TRH-4000lm-4000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|--------|-------|
| 45° | 924.7 | 998.4 | 1058.0 | 1091.1 | 1115.2 | 1070.5 | 1018.9 | 958.5 | 889.2 | 825.6 | 773.2 |
| 45.5° | 875.5 | 944.8 | 1001.6 | 1037.5 | 1060.4 | 1014.9 | 964.2 | 908.1 | 840.5 | 778.4 | 728.9 |
| 46° | 824.7 | 892.8 | 945.6 | 983.9 | 1007.7 | 961.7 | 911.0 | 856.2 | 792.9 | 731.7 | 685.7 |
| 46.5° | 774.8 | 841.3 | 890.0 | 930.7 | 956.5 | 909.4 | 857.4 | 805.8 | 744.6 | 688.6 | 644.2 |
| 47° | 726.0 | 790.1 | 836.8 | 877.1 | 905.3 | 858.2 | 805.8 | 754.6 | 697.8 | 643.8 | 603.6 |
| 47.5° | 678.5 | 739.7 | 785.7 | 825.1 | 854.6 | 808.2 | 755.4 | 706.3 | 652.7 | 602.7 | 565.3 |
| 48° | 632.2 | 691.0 | 735.3 | 774.0 | 804.6 | 761.1 | 706.7 | 657.5 | 609.2 | 562.5 | 528.6 |
| 48.5° | 587.8 | 643.8 | 685.7 | 724.4 | 755.4 | 715.6 | 660.0 | 611.2 | 566.5 | 525.0 | 494.0 |
| 49° | 544.3 | 597.5 | 639.0 | 675.7 | 706.7 | 670.0 | 614.0 | 565.7 | 523.8 | 487.5 | 460.5 |
| 49.5° | 502.4 | 552.4 | 593.1 | 628.5 | 658.3 | 626.1 | 571.7 | 522.6 | 482.7 | 452.1 | 427.5 |
| 50° | 462.9 | 507.7 | 548.8 | 581.0 | 612.8 | 582.2 | 529.8 | 481.5 | 442.8 | 418.6 | 397.3 |
| 50.5° | 423.9 | 464.1 | 505.2 | 535.9 | 568.1 | 540.7 | 490.3 | 442.4 | 405.3 | 389.2 | 369.5 |
| 51° | 387.2 | 423.9 | 465.0 | 492.3 | 524.6 | 500.0 | 452.9 | 405.7 | 372.7 | 360.2 | 341.7 |
| 51.5° | 350.9 | 385.6 | 425.5 | 451.3 | 483.9 | 461.3 | 417.0 | 374.7 | 340.5 | 330.8 | 314.3 |
| 52° | 317.1 | 349.7 | 388.4 | 412.2 | 444.4 | 423.5 | 387.2 | 343.7 | 307.8 | 301.8 | 286.5 |
| 52.5° | 284.9 | 315.1 | 352.1 | 373.9 | 406.1 | 391.2 | 357.0 | 312.3 | 275.6 | 272.8 | 260.7 |
| 53° | 255.0 | 283.6 | 318.7 | 338.0 | 371.9 | 358.6 | 326.8 | 281.2 | 250.2 | 247.8 | 237.7 |
| 53.5° | 226.8 | 254.6 | 286.1 | 304.6 | 337.6 | 326.4 | 296.5 | 255.0 | 227.2 | 225.2 | 215.2 |
| 54° | 201.9 | 227.6 | 256.7 | 274.0 | 303.0 | 293.7 | 266.3 | 231.3 | 206.7 | 203.9 | 194.6 |
| 54.5° | 178.9 | 202.3 | 227.6 | 245.0 | 269.1 | 261.5 | 241.7 | 209.5 | 188.2 | 183.3 | 173.7 |
| 55° | 157.9 | 179.7 | 201.9 | 218.8 | 240.1 | 236.5 | 218.4 | 190.2 | 170.8 | 164.8 | 154.7 |
| 55.5° | 137.8 | 157.5 | 177.3 | 194.2 | 213.9 | 210.7 | 196.2 | 170.8 | 153.9 | 146.3 | 136.2 |
| 56° | 122.1 | 137.4 | 155.5 | 171.2 | 189.8 | 188.2 | 174.9 | 153.5 | 137.8 | 129.3 | 119.3 |
| 56.5° | 106.0 | 121.3 | 136.6 | 149.5 | 167.6 | 166.4 | 154.7 | 137.0 | 122.5 | 113.2 | 103.1 |
| 57° | 90.3 | 105.6 | 120.1 | 132.2 | 147.1 | 146.3 | 136.2 | 120.9 | 107.6 | 98.3 | 88.6 |
| 57.5° | 74.5 | 89.4 | 103.1 | 115.2 | 127.3 | 126.9 | 118.5 | 105.6 | 93.9 | 84.6 | 74.9 |
| 58° | 59.6 | 73.3 | 86.6 | 97.9 | 109.6 | 109.2 | 102.3 | 91.5 | 80.6 | 70.5 | 60.0 |
| 58.5° | 45.1 | 57.6 | 70.1 | 81.0 | 93.5 | 93.1 | 87.4 | 77.8 | 66.5 | 60.0 | 51.2 |
| 59° | 33.0 | 43.5 | 54.4 | 64.1 | 77.8 | 78.6 | 72.5 | 62.9 | 56.4 | 49.6 | 41.9 |
| 59.5° | 24.2 | 31.8 | 39.9 | 47.9 | 65.7 | 67.7 | 61.2 | 53.2 | 46.3 | 38.7 | 33.0 |
| 60° | 18.1 | 23.0 | 29.0 | 35.1 | 53.6 | 56.8 | 50.4 | 43.5 | 35.9 | 28.2 | 24.2 |
| 60.5° | 13.3 | 17.3 | 21.0 | 25.0 | 41.5 | 45.9 | 39.1 | 33.8 | 25.8 | 17.7 | 14.9 |
| 61° | 11.3 | 14.9 | 15.7 | 18.5 | 29.4 | 35.1 | 27.8 | 24.2 | 16.1 | 13.7 | 11.7 |
| 61.5° | 9.3 | 12.5 | 13.3 | 13.7 | 17.3 | 24.2 | 16.9 | 14.5 | 12.1 | 10.9 | 9.3 |
| 62° | 7.3 | 10.1 | 10.9 | 11.7 | 12.9 | 13.3 | 12.9 | 10.9 | 9.3 | 8.5 | 7.7 |
| 62.5° | 5.2 | 7.7 | 8.5 | 9.7 | 10.1 | 10.1 | 9.7 | 8.9 | 7.3 | 6.8 | 6.0 |
| 63° | 4.4 | 5.6 | 6.4 | 7.7 | 8.1 | 8.1 | 7.7 | 6.8 | 6.0 | 5.6 | 5.2 |
| 63.5° | 3.6 | 4.4 | 5.2 | 5.6 | 6.4 | 6.4 | 6.0 | 5.6 | 4.8 | 4.8 | 4.4 |
| 64° | 2.8 | 3.6 | 4.4 | 4.8 | 5.2 | 5.2 | 5.2 | 4.8 | 4.0 | 4.0 | 3.6 |
| 64.5° | 2.4 | 3.2 | 3.6 | 4.0 | 4.4 | 4.4 | 4.0 | 4.0 | 3.2 | 3.2 | 3.2 |
| 65° | 2.0 | 2.8 | 3.2 | 3.2 | 3.6 | 3.6 | 3.6 | 3.2 | 2.8 | 2.8 | 2.8 |
| 65.5° | 2.0 | 2.4 | 2.4 | 2.8 | 3.2 | 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: P776393

CATALOG NUMBER: HCDJBL3040CSD-HCD6TRH-4000lm-4000K

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: P776393
CATALOG NUMBER: HCDJBL3040CSD-HCD6TRH-4000lm-4000K

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: P776393

CATALOG NUMBER: HCDJBL3040CSD-HCD6TRH-4000lm-4000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|--------|--------|--------|--------|--------|
| 0° | 3676.1 | 3676.1 | 3676.1 | 3676.1 | 3676.1 | 3676.1 |
| 0.5° | 3674.9 | 3670.5 | 3672.9 | 3674.9 | 3676.1 | 3675.3 |
| 1° | 3670.9 | 3665.6 | 3668.4 | 3671.7 | 3673.7 | 3674.5 |
| 1.5° | 3665.6 | 3660.0 | 3663.6 | 3667.2 | 3671.7 | 3673.3 |
| 2° | 3659.2 | 3653.1 | 3657.2 | 3662.4 | 3667.2 | 3671.3 |
| 2.5° | 3652.3 | 3645.5 | 3649.5 | 3656.8 | 3663.2 | 3671.3 |
| 3° | 3644.3 | 3636.6 | 3641.9 | 3649.5 | 3659.2 | 3665.2 |
| 3.5° | 3635.4 | 3626.9 | 3632.6 | 3642.7 | 3653.5 | 3661.6 |
| 4° | 3626.1 | 3616.9 | 3622.9 | 3634.6 | 3647.9 | 3657.2 |
| 4.5° | 3615.7 | 3605.2 | 3612.4 | 3625.7 | 3640.6 | 3651.5 |
| 5° | 3604.0 | 3592.7 | 3600.8 | 3615.7 | 3633.0 | 3645.9 |
| 5.5° | 3591.5 | 3580.2 | 3588.3 | 3605.2 | 3624.1 | 3640.6 |
| 6° | 3578.2 | 3566.5 | 3575.8 | 3594.3 | 3615.3 | 3631.4 |
| 6.5° | 3564.1 | 3551.2 | 3561.7 | 3581.8 | 3605.2 | 3623.3 |
| 7° | 3549.6 | 3536.7 | 3547.2 | 3568.9 | 3594.7 | 3614.1 |
| 7.5° | 3533.9 | 3520.2 | 3531.9 | 3556.0 | 3583.0 | 3603.6 |
| 8° | 3518.2 | 3502.9 | 3516.1 | 3541.5 | 3570.5 | 3592.3 |
| 8.5° | 3501.2 | 3485.1 | 3499.2 | 3526.2 | 3556.4 | 3580.6 |
| 9° | 3484.3 | 3467.4 | 3481.5 | 3510.5 | 3542.3 | 3567.7 |
| 9.5° | 3465.4 | 3448.5 | 3463.8 | 3493.6 | 3527.0 | 3553.6 |
| 10° | 3446.8 | 3429.5 | 3444.8 | 3476.7 | 3511.3 | 3539.1 |
| 10.5° | 3427.1 | 3408.6 | 3425.9 | 3458.5 | 3494.8 | 3523.4 |
| 11° | 3407.0 | 3387.6 | 3405.8 | 3439.2 | 3477.5 | 3507.3 |
| 11.5° | 3386.4 | 3366.7 | 3384.8 | 3419.5 | 3459.3 | 3490.4 |
| 12° | 3364.7 | 3344.1 | 3363.4 | 3399.3 | 3440.0 | 3471.4 |
| 12.5° | 3342.9 | 3321.9 | 3341.7 | 3378.0 | 3420.3 | 3452.9 |
| 13° | 3319.9 | 3298.6 | 3318.7 | 3356.6 | 3400.5 | 3434.0 |
| 13.5° | 3296.6 | 3274.8 | 3295.0 | 3334.0 | 3379.2 | 3413.4 |
| 14° | 3272.0 | 3250.6 | 3270.8 | 3311.9 | 3357.8 | 3393.3 |
| 14.5° | 3247.0 | 3225.7 | 3246.2 | 3288.5 | 3335.2 | 3371.5 |
| 15° | 3221.2 | 3199.9 | 3220.8 | 3264.3 | 3313.5 | 3349.3 |
| 15.5° | 3196.2 | 3172.9 | 3194.6 | 3239.4 | 3288.9 | 3326.4 |
| 16° | 3169.2 | 3146.7 | 3168.4 | 3214.8 | 3265.1 | 3303.0 |
| 16.5° | 3142.3 | 3118.5 | 3141.0 | 3189.8 | 3241.0 | 3278.8 |
| 17° | 3114.1 | 3091.1 | 3113.6 | 3163.6 | 3216.0 | 3254.3 |
| 17.5° | 3086.7 | 3062.1 | 3085.4 | 3135.8 | 3189.0 | 3228.5 |
| 18° | 3058.4 | 3032.7 | 3057.2 | 3108.4 | 3162.4 | 3203.1 |
| 18.5° | 3029.0 | 3002.8 | 3028.6 | 3080.2 | 3135.4 | 3176.9 |
| 19° | 3000.0 | 2973.8 | 2998.4 | 3051.2 | 3107.2 | 3149.9 |
| 19.5° | 2970.6 | 2943.6 | 2969.4 | 3022.6 | 3079.0 | 3122.5 |
| 20° | 2941.2 | 2912.2 | 2940.0 | 2992.4 | 3050.0 | 3095.1 |
| 20.5° | 2912.2 | 2881.6 | 2909.8 | 2961.8 | 3019.8 | 3066.5 |
| 21° | 2880.8 | 2850.6 | 2879.2 | 2931.1 | 2989.6 | 3037.9 |

TEST NUMBER: P776393

CATALOG NUMBER: HCDJBL3040CSD-HCD6TRH-4000lm-4000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|--------|--------|--------|--------|--------|
| 22.5° | 2784.5 | 2756.3 | 2784.5 | 2834.0 | 2894.9 | 2949.7 |
| 23° | 2751.4 | 2723.6 | 2751.4 | 2801.0 | 2862.2 | 2919.4 |
| 23.5° | 2718.8 | 2691.4 | 2720.0 | 2768.0 | 2829.2 | 2888.8 |
| 24° | 2685.0 | 2658.4 | 2686.2 | 2734.1 | 2795.4 | 2857.0 |
| 24.5° | 2651.1 | 2625.3 | 2653.5 | 2699.5 | 2762.3 | 2824.8 |
| 25° | 2617.3 | 2591.1 | 2619.3 | 2664.8 | 2728.5 | 2792.1 |
| 25.5° | 2582.6 | 2557.2 | 2585.4 | 2630.2 | 2693.8 | 2759.5 |
| 26° | 2548.8 | 2523.0 | 2549.6 | 2593.5 | 2659.6 | 2726.9 |
| 26.5° | 2513.3 | 2487.5 | 2513.3 | 2558.4 | 2624.5 | 2692.2 |
| 27° | 2477.1 | 2451.3 | 2476.7 | 2520.2 | 2589.1 | 2658.4 |
| 27.5° | 2440.0 | 2415.0 | 2438.8 | 2482.7 | 2552.8 | 2622.9 |
| 28° | 2402.1 | 2375.1 | 2398.9 | 2444.4 | 2515.7 | 2587.9 |
| 28.5° | 2362.6 | 2335.6 | 2361.0 | 2405.7 | 2478.3 | 2552.0 |
| 29° | 2323.1 | 2294.9 | 2320.3 | 2366.7 | 2440.4 | 2515.3 |
| 29.5° | 2282.9 | 2253.8 | 2278.8 | 2326.0 | 2401.7 | 2477.9 |
| 30° | 2241.0 | 2210.7 | 2236.5 | 2285.7 | 2363.0 | 2440.0 |
| 30.5° | 2198.2 | 2164.8 | 2193.8 | 2244.2 | 2322.3 | 2401.3 |
| 31° | 2154.7 | 2118.9 | 2148.7 | 2202.7 | 2281.6 | 2361.8 |
| 31.5° | 2110.4 | 2072.1 | 2103.6 | 2161.6 | 2240.6 | 2321.1 |
| 32° | 2065.7 | 2024.2 | 2056.4 | 2117.3 | 2199.1 | 2278.8 |
| 32.5° | 2019.0 | 1976.7 | 2009.7 | 2075.0 | 2156.7 | 2237.3 |
| 33° | 1971.4 | 1927.1 | 1961.7 | 2031.4 | 2112.4 | 2193.8 |
| 33.5° | 1923.1 | 1878.3 | 1913.8 | 1987.5 | 2068.5 | 2149.1 |
| 34° | 1874.3 | 1829.6 | 1866.3 | 1942.0 | 2023.0 | 2102.0 |
| 34.5° | 1824.4 | 1780.4 | 1817.5 | 1894.1 | 1977.5 | 2054.0 |
| 35° | 1775.2 | 1732.1 | 1767.9 | 1846.1 | 1929.1 | 2004.0 |
| 35.5° | 1725.6 | 1683.3 | 1720.4 | 1797.0 | 1881.2 | 1954.1 |
| 36° | 1674.9 | 1635.4 | 1672.1 | 1747.0 | 1829.2 | 1900.5 |
| 36.5° | 1624.5 | 1586.6 | 1623.3 | 1695.8 | 1776.4 | 1846.9 |
| 37° | 1573.3 | 1537.1 | 1573.7 | 1639.4 | 1722.0 | 1791.7 |
| 37.5° | 1521.8 | 1486.3 | 1523.4 | 1586.6 | 1668.8 | 1736.9 |
| 38° | 1469.8 | 1436.4 | 1471.4 | 1530.6 | 1610.8 | 1680.1 |
| 38.5° | 1416.2 | 1381.6 | 1417.4 | 1476.6 | 1553.6 | 1626.1 |
| 39° | 1364.2 | 1326.8 | 1363.4 | 1445.6 | 1494.4 | 1569.7 |
| 39.5° | 1311.1 | 1271.6 | 1309.4 | 1382.8 | 1427.5 | 1515.3 |
| 40° | 1257.5 | 1216.8 | 1255.0 | 1319.5 | 1371.9 | 1460.9 |
| 40.5° | 1204.3 | 1164.0 | 1201.1 | 1256.7 | 1316.3 | 1406.9 |
| 41° | 1151.5 | 1113.2 | 1144.7 | 1193.8 | 1261.1 | 1352.1 |
| 41.5° | 1101.1 | 1062.9 | 1090.3 | 1138.2 | 1205.5 | 1298.2 |
| 42° | 1048.0 | 1014.1 | 1037.1 | 1082.2 | 1149.5 | 1243.8 |
| 42.5° | 996.8 | 964.6 | 985.9 | 1027.0 | 1094.7 | 1189.4 |
| 43° | 946.4 | 915.8 | 935.1 | 972.2 | 1038.7 | 1134.2 |
| 43.5° | 895.3 | 866.6 | 883.2 | 918.6 | 984.7 | 1080.2 |

TEST NUMBER: P776393

CATALOG NUMBER: HCDJBL3040CSD-HCD6TRH-4000lm-4000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|-------|--------|-------|--------|-------|
| 45° | 753.0 | 722.0 | 733.7 | 763.5 | 832.0 | 924.7 |
| 45.5° | 707.5 | 676.9 | 684.5 | 715.2 | 784.9 | 875.5 |
| 46° | 663.2 | 632.6 | 637.8 | 668.8 | 738.1 | 824.7 |
| 46.5° | 622.1 | 587.8 | 591.9 | 624.1 | 693.8 | 774.8 |
| 47° | 579.4 | 545.5 | 548.4 | 580.6 | 648.7 | 726.0 |
| 47.5° | 540.3 | 504.0 | 506.9 | 539.5 | 606.8 | 678.5 |
| 48° | 502.8 | 464.1 | 466.6 | 500.0 | 564.1 | 632.2 |
| 48.5° | 466.6 | 425.1 | 429.1 | 462.5 | 523.4 | 587.8 |
| 49° | 432.3 | 389.2 | 393.2 | 427.1 | 483.1 | 544.3 |
| 49.5° | 399.7 | 354.6 | 359.4 | 392.8 | 445.6 | 502.4 |
| 50° | 370.7 | 322.3 | 328.8 | 361.0 | 408.1 | 462.9 |
| 50.5° | 342.1 | 293.3 | 299.4 | 330.4 | 373.5 | 423.9 |
| 51° | 313.1 | 267.1 | 273.2 | 302.2 | 340.9 | 387.2 |
| 51.5° | 284.5 | 243.4 | 248.6 | 274.8 | 309.8 | 350.9 |
| 52° | 259.9 | 222.0 | 226.4 | 250.2 | 280.8 | 317.1 |
| 52.5° | 236.1 | 202.7 | 205.5 | 226.8 | 253.4 | 284.9 |
| 53° | 213.5 | 184.1 | 186.9 | 204.3 | 227.2 | 255.0 |
| 53.5° | 193.4 | 167.2 | 168.8 | 182.9 | 203.1 | 226.8 |
| 54° | 174.1 | 151.1 | 151.9 | 163.6 | 180.9 | 201.9 |
| 54.5° | 155.5 | 136.6 | 137.4 | 145.0 | 160.4 | 178.9 |
| 55° | 138.6 | 122.5 | 122.9 | 129.7 | 139.8 | 157.9 |
| 55.5° | 121.7 | 108.4 | 108.8 | 114.4 | 124.1 | 137.8 |
| 56° | 106.4 | 94.3 | 94.3 | 99.1 | 108.4 | 122.1 |
| 56.5° | 92.3 | 80.2 | 79.8 | 84.2 | 92.7 | 106.0 |
| 57° | 79.0 | 65.7 | 65.3 | 68.9 | 77.0 | 90.3 |
| 57.5° | 64.5 | 51.2 | 51.2 | 54.0 | 62.0 | 74.5 |
| 58° | 54.8 | 39.1 | 38.7 | 41.1 | 47.5 | 59.6 |
| 58.5° | 45.1 | 29.4 | 28.6 | 30.2 | 35.5 | 45.1 |
| 59° | 35.5 | 21.8 | 21.4 | 22.6 | 26.2 | 33.0 |
| 59.5° | 25.8 | 16.5 | 16.1 | 16.9 | 19.3 | 24.2 |
| 60° | 16.1 | 14.1 | 13.7 | 14.5 | 14.5 | 18.1 |
| 60.5° | 12.5 | 11.3 | 11.3 | 12.1 | 12.5 | 13.3 |
| 61° | 10.1 | 8.9 | 8.5 | 10.1 | 10.1 | 11.3 |
| 61.5° | 8.1 | 6.4 | 6.0 | 7.7 | 8.1 | 9.3 |
| 62° | 6.4 | 5.2 | 5.2 | 5.2 | 6.0 | 7.3 |
| 62.5° | 5.2 | 4.4 | 4.0 | 4.4 | 4.8 | 5.2 |
| 63° | 4.4 | 3.6 | 3.6 | 3.6 | 4.0 | 4.4 |
| 63.5° | 3.6 | 3.2 | 2.8 | 2.8 | 3.2 | 3.6 |
| 64° | 3.2 | 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: P776393

CATALOG NUMBER: HCDJBL3040CSD-HCD6TRH-4000lm-4000K

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: P776393

CATALOG NUMBER: HCDJBL3040CSD-HCD6TRH-4000lm-4000K

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 |

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

Scaled Data Report



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°

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

Scaled Data Report



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

Scaled Data Report





| | | | | | | | | | | | |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 21.5° | 3008.5 | 3056.8 | 3096.3 | 3105.6 | 3096.7 | 3075.8 | 3031.9 | 2973.4 | 2927.5 | 2895.3 | 2869.9 |
| 22° | 2979.5 | 3027.8 | 3067.3 | 3077.0 | 3069.3 | 3048.0 | 3002.4 | 2944.4 | 2895.7 | 2863.0 | 2836.9 |



| | | | | | | | | | | | |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| 44° | 1026.6 | 1105.2 | 1172.9 | 1201.5 | 1225.6 | 1181.3 | 1129.3 | 1064.5 | 986.3 | 922.7 | 866.2 |
| 44.5° | 975.0 | 1052.0 | 1115.2 | 1146.3 | 1170.0 | 1126.1 | 1074.9 | 1011.3 | 939.2 | 874.7 | 820.3 |



| | | | | | | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 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 |

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

Scaled Data Report





| | | | | | | |
|-------|--------|--------|--------|--------|--------|--------|
| 21.5° | 2848.5 | 2819.5 | 2847.7 | 2898.9 | 2958.1 | 3008.5 |
| 22° | 2816.7 | 2787.7 | 2816.3 | 2867.1 | 2926.7 | 2979.5 |



| | | | | | | |
|-------|-------|-------|-------|-------|-------|--------|
| 44° | 846.9 | 817.1 | 832.4 | 865.8 | 933.1 | 1026.6 |
| 44.5° | 800.2 | 768.7 | 783.2 | 814.3 | 882.4 | 975.0 |

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

Scaled Data Report



| | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|
| 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 |

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

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 |

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

Scaled Data Report



(END OF REPORT)