

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P322702

Luminaire Tested: **GLEON-SA8D-827-U-T4FT-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P322702
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-17)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA8D-827-U-T4FT-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32463 lumens
Efficiency: N/A
Efficacy: 63.5 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

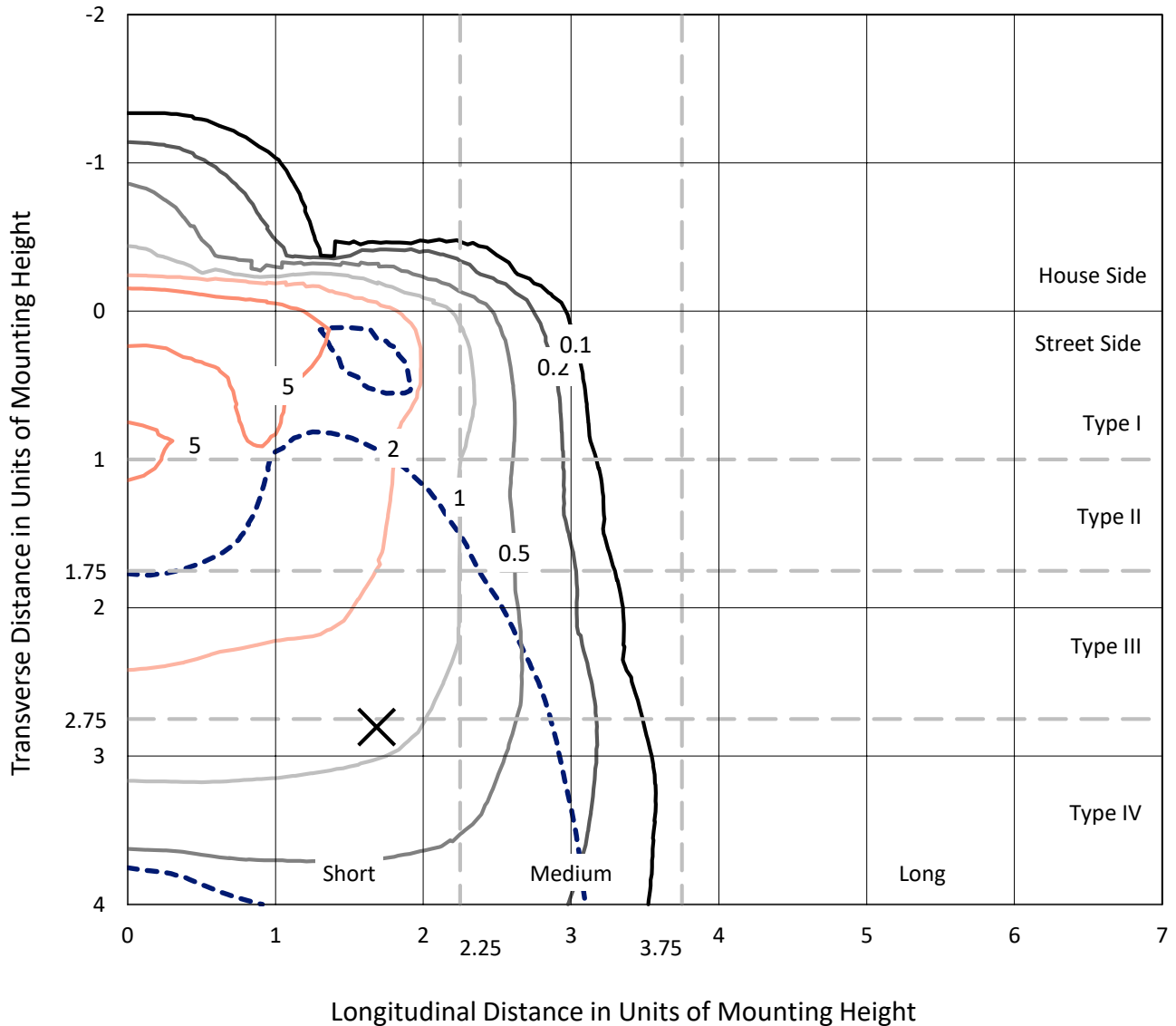
Input Watts (W): 511
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

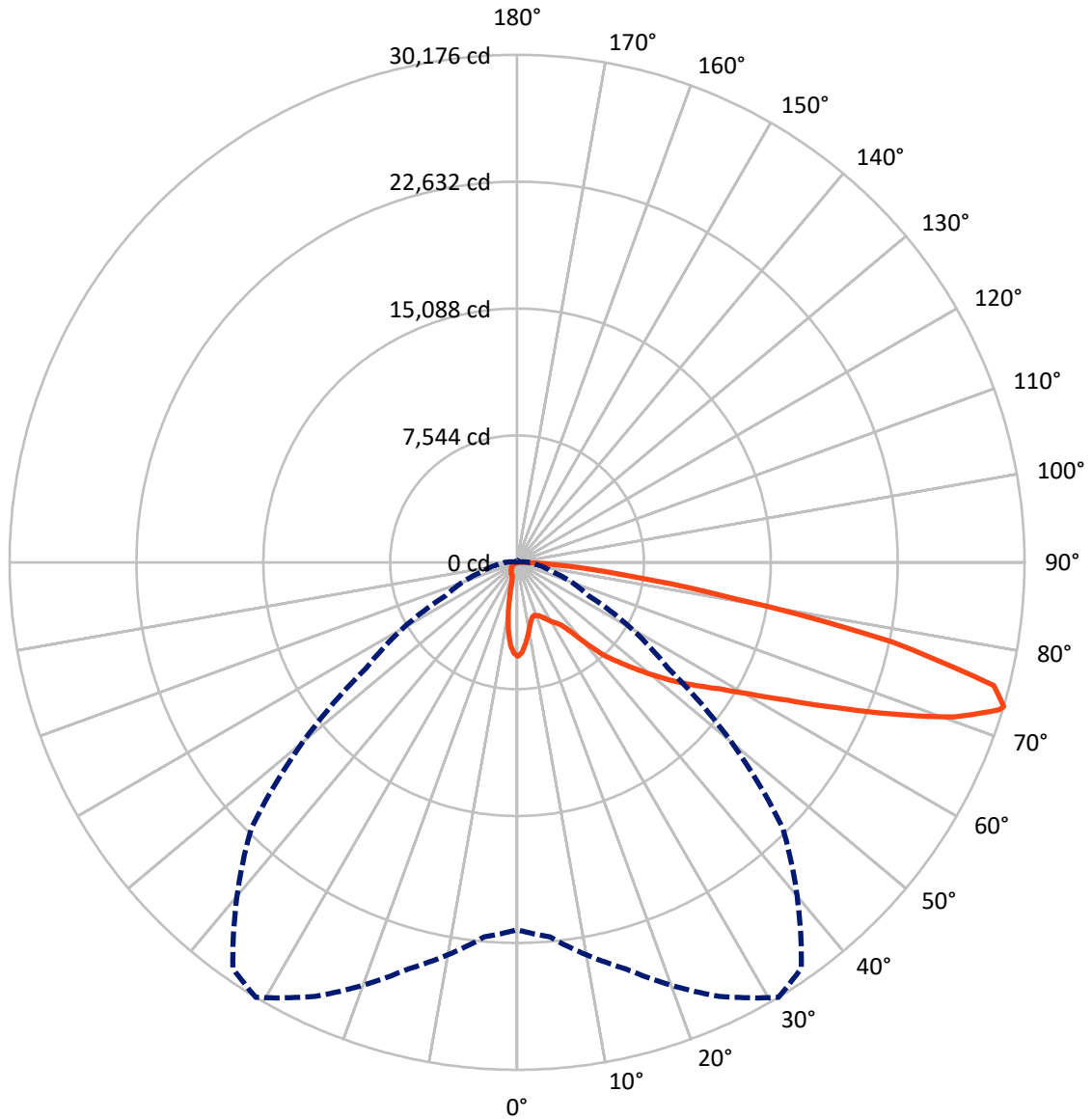
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 31-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2959.1 | 0.0 | 2959.1 |
| | % Fixture | 9.1 | 0.0 | 9.1 |
| Street Side | Lumens | 29503.9 | 0.0 | 29503.9 |
| | % Fixture | 90.9 | 0.0 | 90.9 |
| Total | Lumens | 32463.0 | 0.0 | 32463.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 463.1 | 1.4 |
| 10°-20° | 1005.5 | 3.1 |
| 20°-30° | 1506.6 | 4.6 |
| 30°-40° | 2397.0 | 7.4 |
| 40°-50° | 4280.3 | 13.2 |
| 50°-60° | 6641.8 | 20.5 |
| 60°-70° | 8829.4 | 27.2 |
| 70°-80° | 6641.5 | 20.5 |
| 80°-90° | 697.9 | 2.1 |
| 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°-90° | 32463.0 | 100.0 |
| 0°-180° | 32463.0 | 100.0 |



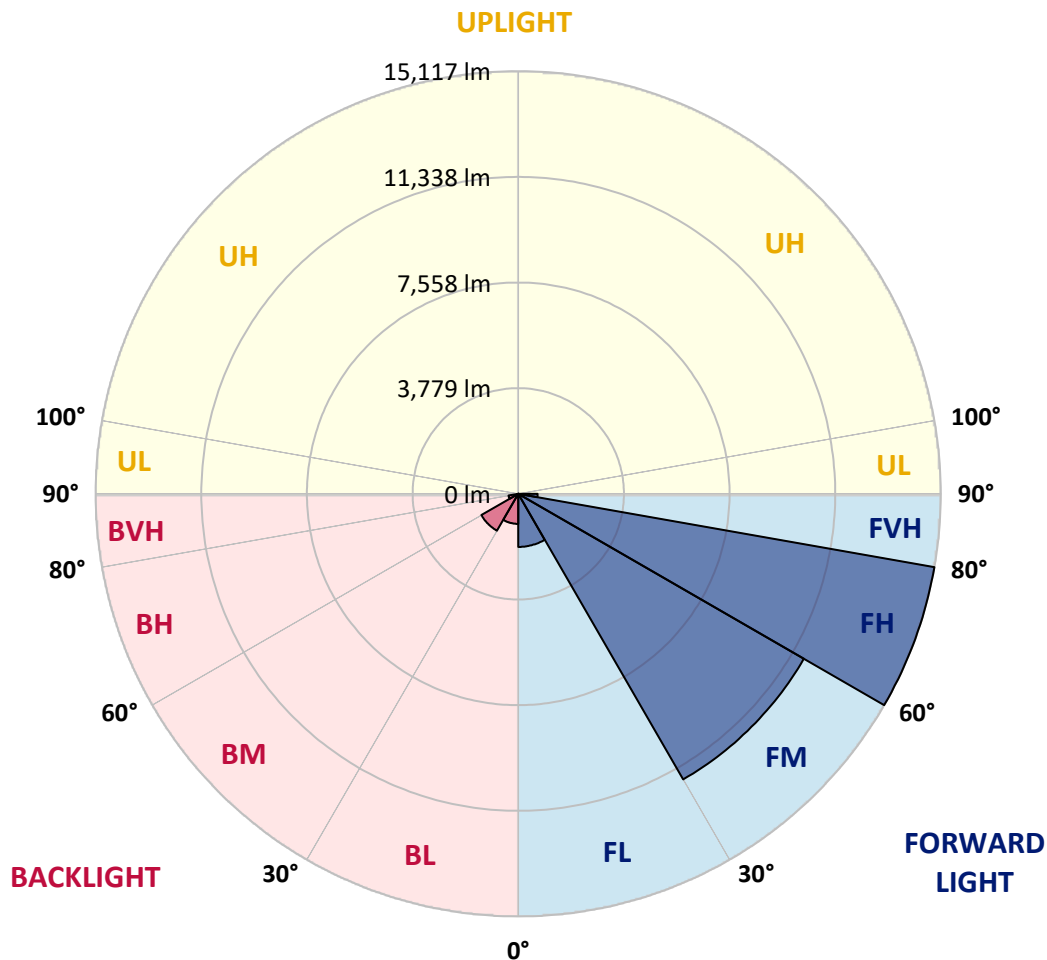
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|--------|
| | | | B | U | G |
| FL (0°-30°) | 1899.1 | 5.9 | | | |
| FM (30°-60°) | 11795.9 | 36.3 | | | |
| FH (60°-80°) | 15116.8 | 46.6 | | | G5 |
| FVH (80°-90°) | 692.0 | 2.1 | | | G4/750 |
| BL (0°-30°) | 1076.1 | 3.3 | B3/2500 | | |
| BM (30°-60°) | 1523.1 | 4.7 | B2/2500 | | |
| BH (60°-80°) | 354.0 | 1.1 | B1/500 | | G1/500 |
| BVH (80°-90°) | 5.9 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 31° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5585.3 | 5585.3 | 5585.3 | 5585.3 | 5585.3 | 5585.3 | 5585.3 | 5585.3 | 5585.3 | 5585.3 | 5585.3 |
| 2.5° | 5293.0 | 5315.3 | 5339.1 | 5343.9 | 5383.6 | 5385.2 | 5442.4 | 5485.2 | 5528.1 | 5569.4 | 5583.7 |
| 5° | 4749.8 | 4786.3 | 4829.2 | 4872.1 | 4956.3 | 4989.6 | 5129.4 | 5272.4 | 5409.0 | 5539.3 | 5602.8 |
| 7.5° | 4169.9 | 4211.2 | 4271.6 | 4378.0 | 4471.8 | 4536.9 | 4757.7 | 5011.9 | 5266.0 | 5505.9 | 5644.1 |
| 10° | 3640.9 | 3679.1 | 3742.6 | 3855.4 | 4000.0 | 4088.9 | 4386.0 | 4738.6 | 5111.9 | 5475.7 | 5706.1 |
| 12.5° | 3304.2 | 3324.8 | 3359.8 | 3480.5 | 3610.8 | 3710.8 | 4060.3 | 4497.2 | 4984.9 | 5474.1 | 5806.1 |
| 15° | 3242.2 | 3248.6 | 3220.0 | 3274.0 | 3375.7 | 3472.6 | 3826.8 | 4301.8 | 4888.0 | 5499.5 | 5936.4 |
| 17.5° | 3340.7 | 3337.5 | 3242.2 | 3235.9 | 3316.9 | 3396.3 | 3712.4 | 4166.8 | 4819.6 | 5558.3 | 6104.8 |
| 20° | 3490.0 | 3478.9 | 3313.7 | 3283.5 | 3369.3 | 3444.0 | 3704.5 | 4115.9 | 4794.2 | 5656.8 | 6309.7 |
| 22.5° | 3688.6 | 3669.5 | 3410.6 | 3378.8 | 3471.0 | 3548.8 | 3803.0 | 4165.2 | 4816.5 | 5788.7 | 6548.0 |
| 25° | 3934.8 | 3906.2 | 3577.4 | 3542.5 | 3636.2 | 3714.0 | 3979.3 | 4306.5 | 4883.2 | 5949.1 | 6849.8 |
| 27.5° | 4212.8 | 4171.5 | 3844.3 | 3753.7 | 3860.2 | 3941.2 | 4214.4 | 4522.6 | 4988.0 | 6119.1 | 7219.9 |
| 30° | 4474.9 | 4420.9 | 4125.5 | 3976.1 | 4106.4 | 4196.9 | 4468.6 | 4779.9 | 5156.4 | 6381.2 | 7726.7 |
| 32.5° | 4738.6 | 4678.3 | 4376.4 | 4198.5 | 4316.1 | 4414.6 | 4730.7 | 5134.2 | 5472.5 | 6781.5 | 8400.2 |
| 35° | 5345.5 | 5281.9 | 4911.8 | 4617.9 | 4616.3 | 4671.9 | 5097.6 | 5618.7 | 5890.3 | 7339.1 | 9204.0 |
| 37.5° | 6366.9 | 6330.4 | 5977.7 | 5420.1 | 5270.8 | 5208.8 | 5598.0 | 6196.9 | 6490.8 | 8106.3 | 10111.1 |
| 40° | 7485.2 | 7453.5 | 7057.9 | 6552.7 | 6325.6 | 6173.1 | 6316.1 | 7002.3 | 7339.1 | 9043.6 | 11037.2 |
| 42.5° | 8748.1 | 8597.2 | 7891.9 | 7741.0 | 7537.6 | 7421.7 | 7293.0 | 7995.1 | 8381.2 | 10063.4 | 11955.4 |
| 45° | 9895.0 | 9640.9 | 8725.9 | 8497.1 | 8451.1 | 8479.7 | 8551.1 | 9329.5 | 9553.5 | 11275.5 | 12870.4 |
| 47.5° | 10578.1 | 10378.0 | 9675.8 | 9456.6 | 9443.9 | 9632.9 | 10173.0 | 10837.1 | 10721.1 | 12331.9 | 13675.8 |
| 50° | 11227.8 | 11046.7 | 10463.7 | 10517.8 | 10576.5 | 10833.9 | 12014.2 | 12387.5 | 11787.0 | 13289.8 | 14414.5 |
| 52.5° | 11753.6 | 11477.2 | 11172.2 | 11475.7 | 11764.8 | 12179.4 | 13914.1 | 13779.0 | 12543.2 | 14052.3 | 15046.7 |
| 55° | 12057.1 | 11931.6 | 12079.3 | 12384.3 | 12927.6 | 13601.1 | 15707.5 | 14937.1 | 13096.0 | 14748.1 | 15467.7 |
| 57.5° | 13169.0 | 12922.8 | 13216.7 | 13480.4 | 14188.9 | 15130.9 | 17243.7 | 15799.7 | 13494.7 | 15178.6 | 15564.6 |
| 60° | 14514.5 | 14316.0 | 14489.1 | 14927.6 | 15883.9 | 16991.1 | 18679.7 | 16503.4 | 13702.8 | 15455.0 | 15313.6 |
| 62.5° | 16655.9 | 16393.8 | 16285.8 | 16776.6 | 18044.3 | 19253.2 | 19769.4 | 16991.1 | 13656.7 | 15332.6 | 14452.6 |
| 65° | 19524.8 | 19253.2 | 18770.3 | 19215.0 | 20827.4 | 21680.5 | 20987.9 | 17094.3 | 13339.0 | 14343.0 | 12276.3 |
| 67.5° | 22463.6 | 22266.6 | 21853.6 | 22603.4 | 24058.5 | 24333.3 | 22276.2 | 16843.3 | 12316.0 | 11629.7 | 8673.5 |
| 70° | 24404.8 | 24320.6 | 24589.1 | 26247.5 | 27545.4 | 27466.0 | 23458.1 | 15494.7 | 9599.6 | 7151.6 | 4290.7 |
| 72.5° | 23005.3 | 23408.8 | 25391.3 | 28398.4 | 29983.8 | 29335.7 | 22851.2 | 11898.2 | 5486.8 | 2751.4 | 1240.7 |
| 73° | 21845.7 | 22362.0 | 25030.7 | 28479.4 | 30176.0 | 29465.9 | 22341.3 | 10921.2 | 4676.7 | 2171.5 | 940.4 |
| 75° | 15197.6 | 15831.4 | 20722.6 | 26523.9 | 29276.9 | 28074.4 | 18622.5 | 6684.6 | 2166.8 | 962.7 | 379.7 |
| 77.5° | 7378.8 | 7847.4 | 11410.5 | 19164.2 | 22768.6 | 21934.6 | 11593.2 | 2490.8 | 978.5 | 602.1 | 174.7 |
| 80° | 2754.5 | 3062.7 | 4953.1 | 9753.7 | 13157.9 | 13502.6 | 5099.2 | 942.0 | 651.3 | 484.5 | 89.0 |
| 82.5° | 721.2 | 803.8 | 1826.8 | 4349.4 | 6743.4 | 7057.9 | 1607.6 | 475.0 | 476.6 | 398.7 | 54.0 |
| 85° | 230.3 | 263.7 | 570.3 | 1952.3 | 3177.1 | 2789.5 | 419.4 | 230.3 | 346.3 | 297.1 | 30.2 |
| 87.5° | 28.6 | 36.5 | 181.1 | 459.1 | 700.5 | 389.2 | 65.1 | 68.3 | 147.7 | 165.2 | 17.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CATALOG NUMBER: GLEON-SA8D-827-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5585.3 | 5585.3 | 5585.3 | 5585.3 | 5585.3 | 5585.3 | 5585.3 | 5585.3 | 5585.3 | 5585.3 | 5585.3 |
| 2.5° | 5598.0 | 5590.1 | 5591.7 | 5550.4 | 5523.4 | 5469.4 | 5413.8 | 5388.3 | 5361.3 | 5350.2 | 5361.3 |
| 5° | 5626.6 | 5612.3 | 5571.0 | 5443.9 | 5308.9 | 5134.2 | 4970.6 | 4846.7 | 4691.0 | 4648.1 | 4692.6 |
| 7.5° | 5671.1 | 5642.5 | 5521.8 | 5262.9 | 4962.6 | 4629.0 | 4254.1 | 3980.9 | 3756.9 | 3612.4 | 3664.8 |
| 10° | 5736.2 | 5682.2 | 5439.2 | 4999.2 | 4462.2 | 3871.3 | 3339.1 | 2924.5 | 2630.6 | 2509.9 | 2505.1 |
| 12.5° | 5845.8 | 5744.2 | 5337.5 | 4656.0 | 3850.6 | 3062.7 | 2365.3 | 1915.8 | 1677.5 | 1523.4 | 1520.2 |
| 15° | 5966.6 | 5817.3 | 5208.8 | 4244.6 | 3139.0 | 2193.8 | 1523.4 | 1181.9 | 1027.8 | 978.5 | 972.2 |
| 17.5° | 6114.3 | 5901.4 | 5042.0 | 3737.8 | 2393.9 | 1453.5 | 994.4 | 895.9 | 889.6 | 884.8 | 884.8 |
| 20° | 6300.2 | 6001.5 | 4827.6 | 3158.0 | 1698.2 | 970.6 | 845.1 | 851.5 | 854.6 | 848.3 | 849.9 |
| 22.5° | 6516.2 | 6103.2 | 4571.8 | 2535.3 | 1148.5 | 811.7 | 808.6 | 816.5 | 819.7 | 816.5 | 818.1 |
| 25° | 6767.2 | 6220.7 | 4260.5 | 1882.4 | 829.2 | 770.4 | 778.4 | 789.5 | 797.4 | 797.4 | 797.4 |
| 27.5° | 7078.6 | 6363.7 | 3885.6 | 1313.7 | 716.4 | 727.6 | 749.8 | 770.4 | 781.6 | 784.7 | 784.7 |
| 30° | 7483.6 | 6541.6 | 3436.0 | 900.7 | 651.3 | 670.4 | 711.7 | 751.4 | 772.0 | 775.2 | 776.8 |
| 32.5° | 7995.1 | 6741.8 | 2915.0 | 665.6 | 595.7 | 610.0 | 654.5 | 721.2 | 760.9 | 767.3 | 767.3 |
| 35° | 8581.3 | 6973.7 | 2354.2 | 579.8 | 556.0 | 560.8 | 595.7 | 672.0 | 741.9 | 759.3 | 760.9 |
| 37.5° | 9223.1 | 7202.5 | 1790.3 | 541.7 | 522.6 | 522.6 | 548.0 | 613.2 | 695.8 | 749.8 | 756.1 |
| 40° | 9822.0 | 7340.7 | 1255.0 | 511.5 | 492.4 | 492.4 | 514.7 | 562.3 | 640.2 | 721.2 | 738.7 |
| 42.5° | 10374.8 | 7388.3 | 873.7 | 482.9 | 463.9 | 468.6 | 487.7 | 525.8 | 584.6 | 665.6 | 681.5 |
| 45° | 10943.5 | 7380.4 | 637.0 | 449.6 | 435.3 | 449.6 | 463.9 | 492.4 | 535.3 | 581.4 | 584.6 |
| 47.5° | 11372.4 | 7313.7 | 505.2 | 417.8 | 408.3 | 427.3 | 440.0 | 459.1 | 482.9 | 479.7 | 479.7 |
| 50° | 11774.3 | 7151.6 | 406.7 | 374.9 | 381.3 | 403.5 | 409.8 | 416.2 | 417.8 | 387.6 | 384.4 |
| 52.5° | 12079.3 | 6899.1 | 325.7 | 328.8 | 354.2 | 376.5 | 370.1 | 360.6 | 344.7 | 308.2 | 301.8 |
| 55° | 12181.0 | 6413.0 | 255.8 | 271.6 | 314.5 | 343.1 | 319.3 | 298.6 | 268.5 | 238.3 | 231.9 |
| 57.5° | 11996.7 | 5785.5 | 208.1 | 211.3 | 265.3 | 289.1 | 262.1 | 238.3 | 204.9 | 179.5 | 174.7 |
| 60° | 11605.9 | 5088.1 | 171.6 | 158.9 | 204.9 | 225.6 | 208.1 | 184.3 | 154.1 | 135.0 | 133.4 |
| 62.5° | 10830.7 | 4344.7 | 141.4 | 123.9 | 155.7 | 173.2 | 162.0 | 144.6 | 119.1 | 106.4 | 104.8 |
| 65° | 9200.9 | 3475.7 | 114.4 | 100.1 | 120.7 | 135.0 | 125.5 | 112.8 | 93.7 | 84.2 | 82.6 |
| 67.5° | 6422.5 | 2349.5 | 93.7 | 82.6 | 95.3 | 106.4 | 98.5 | 92.1 | 74.7 | 73.1 | 74.7 |
| 70° | 3097.7 | 1132.6 | 77.8 | 66.7 | 74.7 | 82.6 | 79.4 | 74.7 | 71.5 | 82.6 | 95.3 |
| 72.5° | 888.0 | 379.7 | 62.0 | 55.6 | 60.4 | 65.1 | 68.3 | 66.7 | 77.8 | 100.1 | 116.0 |
| 73° | 683.1 | 306.6 | 58.8 | 52.4 | 57.2 | 63.5 | 66.7 | 65.1 | 79.4 | 101.7 | 116.0 |
| 75° | 292.3 | 147.7 | 44.5 | 42.9 | 47.7 | 55.6 | 58.8 | 58.8 | 79.4 | 103.3 | 111.2 |
| 77.5° | 131.8 | 79.4 | 28.6 | 33.4 | 41.3 | 44.5 | 49.2 | 49.2 | 63.5 | 79.4 | 79.4 |
| 80° | 74.7 | 42.9 | 22.2 | 25.4 | 30.2 | 30.2 | 30.2 | 27.0 | 28.6 | 31.8 | 34.9 |
| 82.5° | 47.7 | 28.6 | 17.5 | 20.7 | 19.1 | 15.9 | 12.7 | 12.7 | 11.1 | 12.7 | 15.9 |
| 85° | 27.0 | 15.9 | 15.9 | 12.7 | 7.9 | 6.4 | 7.9 | 6.4 | 1.6 | 0.0 | 1.6 |
| 87.5° | 15.9 | 9.5 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)