

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: P227542

Luminaire Tested: **ISS-AF-450-LED-E1-T2-7060-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227542
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29758)-DOWNLIGHT AND
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISS-AF-450-LED-E1-T2-7060-ULG
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II, WITH UPLIGHT GLOW
Light Source: (16) 5700K CCT, 70 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4360.2 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type II - Medium - Non-Cutoff
BUG Rating: B1 - U5 - G1

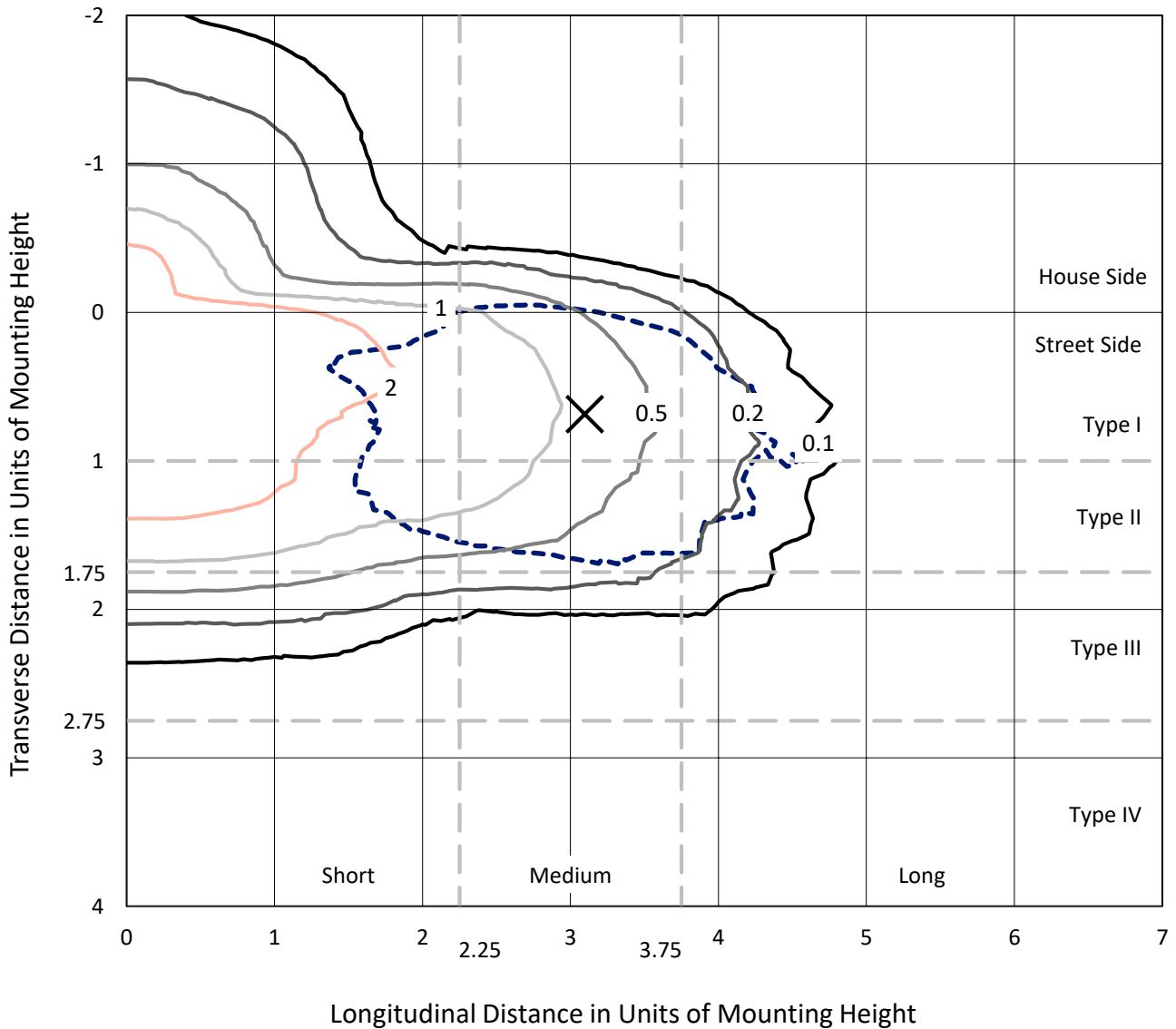
Input Watts (W): 42.01
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P227542
 CATALOG NUMBER: ISS-AF-450-LED-E1-T2-7060-ULG

Iso-Footcandle Lines of Horizontal Illumination

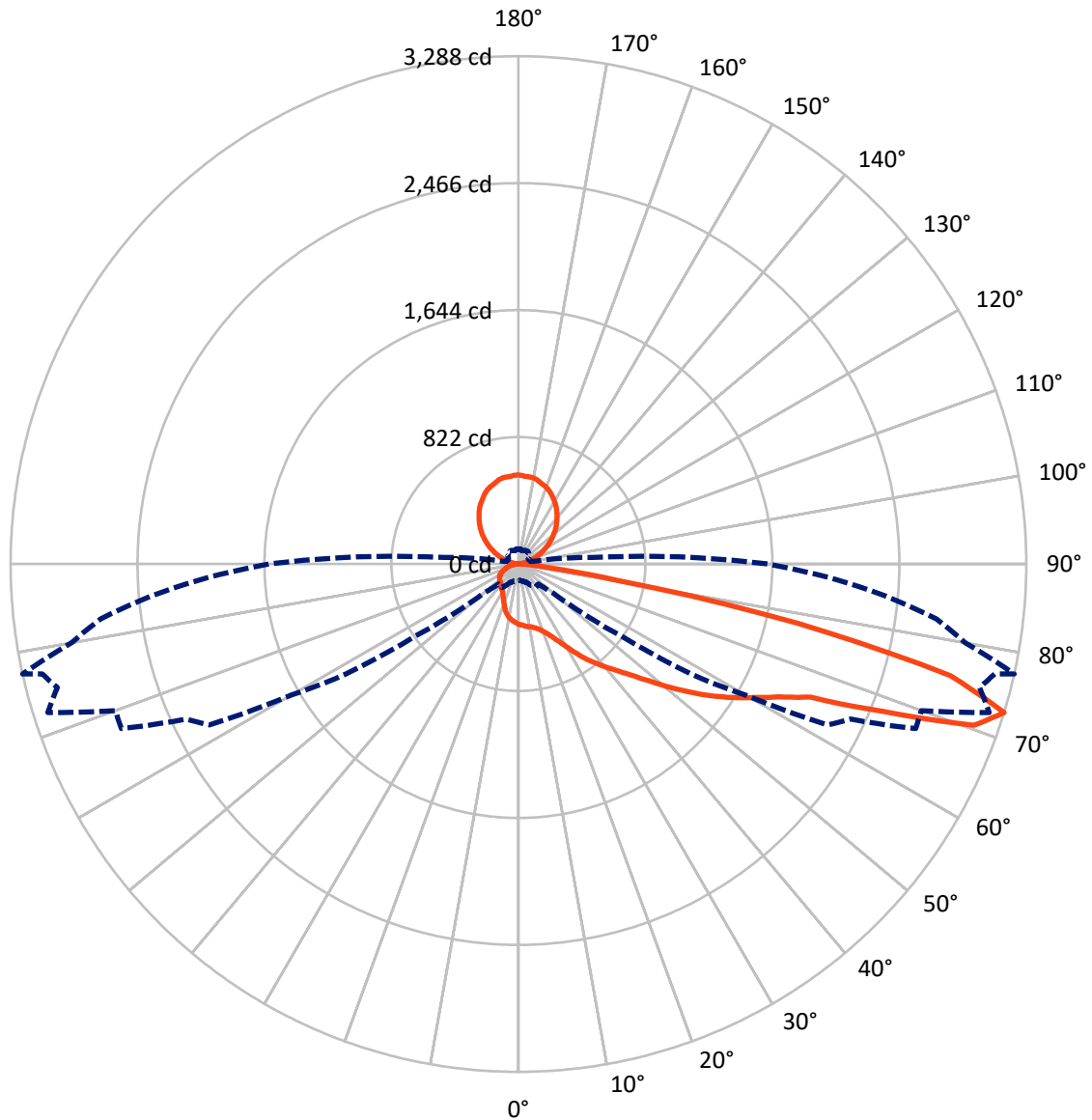
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.8 fc
 Type II - Medium - Non-Cutoff

REPORT NUMBER: P227542
CATALOG NUMBER: ISS-AF-450-LED-E1-T2-7060-ULG

Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P227542

CATALOG NUMBER: ISS-AF-450-LED-E1-T2-7060-ULG

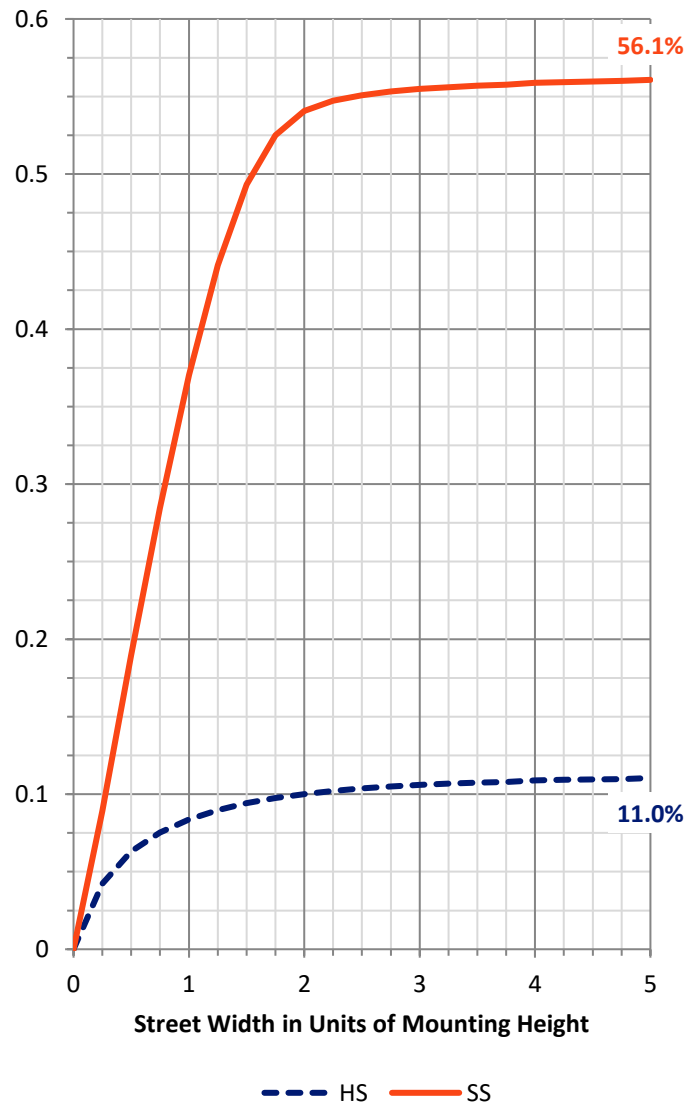
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 486.2 | 713.1 | 1199.3 |
| | % Fixture | 11.2 | 16.4 | 27.5 |
| Street Side | Lumens | 2447.8 | 713.1 | 3160.9 |
| | % Fixture | 56.1 | 16.4 | 72.5 |
| Total | Lumens | 2934.0 | 1426.2 | 4360.2 |
| | % Fixture | 67.3 | 32.7 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 36.4 | 0.8 |
| 10°-20° | 111.6 | 2.6 |
| 20°-30° | 198.1 | 4.5 |
| 30°-40° | 313.8 | 7.2 |
| 40°-50° | 470.8 | 10.8 |
| 50°-60° | 610.0 | 14.0 |
| 60°-70° | 693.2 | 15.9 |
| 70°-80° | 460.0 | 10.5 |
| 80°-90° | 40.2 | 0.9 |
| 90°-100° | 4.7 | 0.1 |
| 100°-110° | 69.0 | 1.6 |
| 110°-120° | 153.0 | 3.5 |
| 120°-130° | 223.9 | 5.1 |
| 130°-140° | 265.6 | 6.1 |
| 140°-150° | 269.3 | 6.2 |
| 150°-160° | 231.1 | 5.3 |
| 160°-170° | 155.1 | 3.6 |
| 170°-180° | 54.3 | 1.2 |
| 0°-90° | 2934.0 | 67.3 |
| 0°-180° | 4360.2 | 100.0 |



REPORT NUMBER: P227542

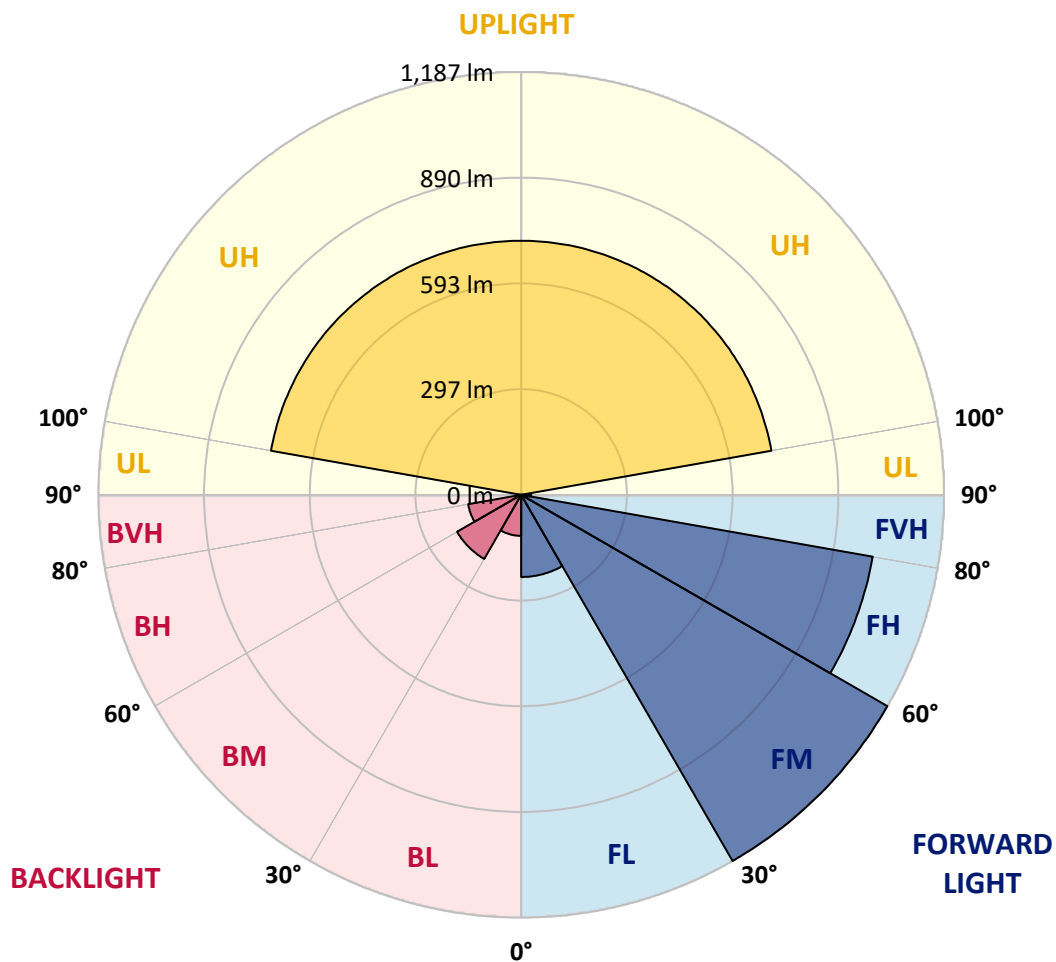
CATALOG NUMBER: ISS-AF-450-LED-E1-T2-7060-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|---------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 230.8 | 5.3 | | | |
| FM | (30°-60°) | 1186.9 | 27.2 | | | |
| FH | (60°-80°) | 1002.0 | 23.0 | | | G1/1800 |
| FVH | (80°-90°) | 28.1 | 0.6 | | | G1/100 |
| BL | (0°-30°) | 115.2 | 2.6 | B1/500 | | |
| BM | (30°-60°) | 207.7 | 4.8 | B0/220 | | |
| BH | (60°-80°) | 151.2 | 3.5 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 12.1 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 4.7 | 0.1 | | U1/10 | |
| UH | (100°-180°) | 713.1 | 16.4 | | U4/1000 | |

BUG Rating: B1-U5-G1

Type II Medium





REPORT NUMBER: P227542

CATALOG NUMBER: ISS-AF-450-LED-E1-T2-7060-ULG

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 37.5° | 40° | 42.5° | 45° | 47.5° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 |
| 2.5° | 424.4 | 422.4 | 421.4 | 419.4 | 417.5 | 416.5 | 413.5 | 411.5 | 414.5 | 413.5 | 413.5 |
| 5° | 456.0 | 454.1 | 451.1 | 448.1 | 444.2 | 441.2 | 438.2 | 435.3 | 437.2 | 435.3 | 433.3 |
| 7.5° | 481.8 | 479.8 | 475.8 | 472.9 | 468.9 | 464.9 | 461.0 | 460.0 | 458.0 | 455.1 | 454.1 |
| 10° | 496.6 | 494.6 | 492.6 | 490.7 | 484.7 | 481.8 | 476.8 | 473.8 | 474.8 | 470.9 | 470.9 |
| 12.5° | 510.4 | 508.5 | 507.5 | 507.5 | 502.5 | 499.6 | 497.6 | 494.6 | 496.6 | 490.7 | 488.7 |
| 15° | 523.3 | 521.3 | 518.4 | 521.3 | 520.3 | 519.4 | 518.4 | 517.4 | 520.3 | 514.4 | 515.4 |
| 17.5° | 544.1 | 543.1 | 537.2 | 533.2 | 534.2 | 537.2 | 539.1 | 538.1 | 538.1 | 535.2 | 536.2 |
| 20° | 576.7 | 576.7 | 568.8 | 561.9 | 551.0 | 551.0 | 552.0 | 551.0 | 553.0 | 555.0 | 557.9 |
| 22.5° | 601.5 | 599.5 | 596.5 | 590.6 | 578.7 | 568.8 | 568.8 | 564.9 | 567.8 | 568.8 | 574.8 |
| 25° | 633.1 | 631.1 | 624.2 | 624.2 | 612.3 | 599.5 | 597.5 | 591.6 | 598.5 | 585.6 | 595.5 |
| 27.5° | 671.7 | 669.7 | 660.8 | 656.9 | 650.9 | 635.1 | 631.1 | 632.1 | 639.1 | 620.3 | 630.1 |
| 30° | 720.2 | 718.2 | 707.3 | 696.4 | 686.5 | 669.7 | 667.7 | 666.8 | 682.6 | 660.8 | 673.7 |
| 32.5° | 781.5 | 781.5 | 769.6 | 754.8 | 735.0 | 712.3 | 704.3 | 705.3 | 727.1 | 703.4 | 725.1 |
| 35° | 874.5 | 862.6 | 840.9 | 818.1 | 797.3 | 770.6 | 759.7 | 757.8 | 777.5 | 753.8 | 778.5 |
| 37.5° | 933.8 | 925.9 | 906.1 | 889.3 | 866.6 | 840.9 | 832.9 | 835.9 | 852.7 | 818.1 | 853.7 |
| 40° | 987.3 | 986.3 | 973.4 | 962.5 | 939.8 | 914.1 | 924.0 | 963.5 | 1008.0 | 940.8 | 941.8 |
| 42.5° | 1022.9 | 1024.9 | 1023.9 | 1024.9 | 1012.0 | 985.3 | 1002.1 | 1057.5 | 1133.7 | 1094.1 | 1057.5 |
| 45° | 1028.8 | 1035.7 | 1038.7 | 1058.5 | 1071.4 | 1055.5 | 1064.4 | 1122.8 | 1275.1 | 1336.5 | 1171.3 |
| 47.5° | 1043.7 | 1050.6 | 1044.6 | 1068.4 | 1127.7 | 1126.7 | 1162.4 | 1184.1 | 1204.9 | 1214.8 | 1339.4 |
| 50° | 1063.4 | 1076.3 | 1070.4 | 1090.1 | 1138.6 | 1166.3 | 1197.0 | 1224.7 | 1207.9 | 1145.5 | 1179.2 |
| 52.5° | 1064.4 | 1079.3 | 1111.9 | 1131.7 | 1179.2 | 1173.2 | 1194.0 | 1179.2 | 1204.9 | 1140.6 | 1173.2 |
| 55° | 977.4 | 980.3 | 1075.3 | 1175.2 | 1258.3 | 1241.5 | 1228.6 | 1195.0 | 1227.7 | 1147.5 | 1189.1 |
| 57.5° | 839.9 | 849.8 | 948.7 | 1116.9 | 1294.9 | 1309.8 | 1305.8 | 1302.8 | 1328.6 | 1221.7 | 1267.2 |
| 60° | 688.5 | 700.4 | 794.4 | 992.2 | 1218.7 | 1257.3 | 1310.7 | 1343.4 | 1409.7 | 1367.1 | 1442.3 |
| 62.5° | 429.3 | 438.2 | 542.1 | 789.4 | 1075.3 | 1151.5 | 1229.6 | 1268.2 | 1364.2 | 1384.0 | 1511.6 |
| 65° | 204.8 | 207.7 | 248.3 | 429.3 | 781.5 | 924.9 | 1040.7 | 1122.8 | 1240.5 | 1329.5 | 1501.7 |
| 67.5° | 159.3 | 160.3 | 175.1 | 228.5 | 400.6 | 496.6 | 628.2 | 737.0 | 862.6 | 1106.0 | 1319.7 |
| 70° | 127.6 | 127.6 | 139.5 | 168.2 | 248.3 | 261.2 | 294.8 | 331.4 | 384.8 | 580.7 | 753.8 |
| 72.5° | 106.8 | 106.8 | 114.8 | 132.6 | 184.0 | 187.0 | 185.0 | 182.0 | 182.0 | 229.5 | 292.8 |
| 75° | 90.0 | 89.0 | 94.0 | 105.8 | 136.5 | 140.5 | 138.5 | 131.6 | 123.7 | 123.7 | 139.5 |
| 77.5° | 73.2 | 73.2 | 77.2 | 83.1 | 98.9 | 100.9 | 100.9 | 95.0 | 88.0 | 89.0 | 96.0 |
| 80° | 57.4 | 57.4 | 60.3 | 64.3 | 69.2 | 68.3 | 68.3 | 62.3 | 57.4 | 56.4 | 60.3 |
| 82.5° | 41.5 | 42.5 | 49.5 | 46.5 | 44.5 | 41.5 | 41.5 | 40.6 | 36.6 | 33.6 | 35.6 |
| 85° | 12.9 | 13.8 | 23.7 | 27.7 | 22.8 | 18.8 | 17.8 | 14.8 | 15.8 | 12.9 | 14.8 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 1.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 95° | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 97.5° | 2.0 | 2.0 | 2.0 | 3.0 | 4.0 | 5.2 | 6.5 | 7.8 | 9.0 | 10.0 | 11.0 |
| 100° | 8.0 | 8.0 | 10.0 | 14.0 | 22.0 | 24.0 | 26.0 | 28.0 | 30.0 | 30.5 | 31.0 |
| 102.5° | 28.0 | 28.0 | 32.0 | 38.0 | 45.0 | 46.2 | 47.5 | 48.8 | 50.0 | 50.2 | 50.5 |
| 105° | 54.0 | 54.0 | 56.0 | 61.0 | 66.0 | 67.0 | 68.0 | 69.0 | 70.0 | 70.2 | 70.5 |
| 107.5° | 78.0 | 77.0 | 80.0 | 84.0 | 88.0 | 88.8 | 89.5 | 90.2 | 91.0 | 91.5 | 92.0 |
| 110° | 101.0 | 102.0 | 103.0 | 106.0 | 110.0 | 110.5 | 111.0 | 111.5 | 112.0 | 112.5 | 113.0 |



REPORT NUMBER: P227542

CATALOG NUMBER: ISS-AF-450-LED-E1-T2-7060-ULG

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 15° | 25° | 35° | 37.5° | 40° | 42.5° | 45° | 47.5° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 124.0 | 124.0 | 126.0 | 129.0 | 132.0 | 132.5 | 133.0 | 133.5 | 134.0 | 134.5 | 135.0 |
| 115° | 146.0 | 147.0 | 149.0 | 151.0 | 154.0 | 154.5 | 155.0 | 155.5 | 156.0 | 156.5 | 157.0 |
| 117.5° | 169.0 | 170.0 | 172.0 | 174.0 | 177.0 | 177.5 | 178.0 | 178.5 | 179.0 | 179.2 | 179.5 |
| 120° | 193.0 | 195.0 | 196.0 | 198.0 | 201.0 | 201.2 | 201.5 | 201.8 | 202.0 | 202.5 | 203.0 |
| 122.5° | 219.0 | 220.0 | 221.0 | 223.0 | 226.0 | 226.2 | 226.5 | 226.8 | 227.0 | 227.2 | 227.5 |
| 125° | 244.0 | 246.0 | 247.0 | 248.0 | 251.0 | 251.2 | 251.5 | 251.8 | 252.0 | 252.2 | 252.5 |
| 127.5° | 267.0 | 269.0 | 270.0 | 272.0 | 274.0 | 274.5 | 275.0 | 275.5 | 276.0 | 276.5 | 277.0 |
| 130° | 290.0 | 292.0 | 293.0 | 294.0 | 298.0 | 298.2 | 298.5 | 298.8 | 299.0 | 299.5 | 300.0 |
| 132.5° | 313.0 | 314.0 | 317.0 | 318.0 | 321.0 | 321.2 | 321.5 | 321.8 | 322.0 | 322.8 | 323.5 |
| 135° | 336.0 | 337.0 | 339.0 | 341.0 | 345.0 | 345.0 | 345.0 | 345.0 | 345.0 | 345.8 | 346.5 |
| 137.5° | 359.0 | 360.0 | 363.0 | 364.0 | 367.0 | 367.0 | 367.0 | 367.0 | 367.0 | 367.5 | 368.0 |
| 140° | 382.0 | 383.0 | 385.0 | 386.0 | 388.0 | 388.2 | 388.5 | 388.8 | 389.0 | 389.2 | 389.5 |
| 142.5° | 404.0 | 406.0 | 408.0 | 407.0 | 410.0 | 410.0 | 410.0 | 410.0 | 410.0 | 410.5 | 411.0 |
| 145° | 425.0 | 426.0 | 428.0 | 428.0 | 431.0 | 431.2 | 431.5 | 431.8 | 432.0 | 432.5 | 433.0 |
| 147.5° | 444.0 | 444.0 | 447.0 | 448.0 | 452.0 | 452.2 | 452.5 | 452.8 | 453.0 | 453.2 | 453.5 |
| 150° | 461.0 | 462.0 | 464.0 | 465.0 | 469.0 | 469.2 | 469.5 | 469.8 | 470.0 | 470.2 | 470.5 |
| 152.5° | 479.0 | 480.0 | 483.0 | 482.0 | 485.0 | 485.2 | 485.5 | 485.8 | 486.0 | 486.2 | 486.5 |
| 155° | 499.0 | 500.0 | 502.0 | 501.0 | 503.0 | 503.0 | 503.0 | 503.0 | 503.0 | 503.2 | 503.5 |
| 157.5° | 513.0 | 515.0 | 517.0 | 516.0 | 519.0 | 519.0 | 519.0 | 519.0 | 519.0 | 519.0 | 519.0 |
| 160° | 525.0 | 527.0 | 529.0 | 529.0 | 532.0 | 532.0 | 532.0 | 532.0 | 532.0 | 532.0 | 532.0 |
| 162.5° | 535.0 | 536.0 | 539.0 | 538.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.2 | 541.5 |
| 165° | 546.0 | 547.0 | 549.0 | 548.0 | 552.0 | 552.0 | 552.0 | 552.0 | 552.0 | 552.2 | 552.5 |
| 167.5° | 555.0 | 556.0 | 559.0 | 558.0 | 561.0 | 560.8 | 560.5 | 560.2 | 560.0 | 560.0 | 560.0 |
| 170° | 562.0 | 563.0 | 566.0 | 565.0 | 567.0 | 566.8 | 566.5 | 566.2 | 566.0 | 565.8 | 565.5 |
| 172.5° | 565.0 | 566.0 | 569.0 | 567.0 | 569.0 | 568.8 | 568.5 | 568.2 | 568.0 | 568.2 | 568.5 |
| 175° | 567.0 | 569.0 | 570.0 | 569.0 | 572.0 | 572.0 | 572.0 | 572.0 | 572.0 | 572.2 | 572.5 |
| 177.5° | 572.0 | 573.0 | 575.0 | 574.0 | 578.0 | 577.8 | 577.5 | 577.2 | 577.0 | 577.0 | 577.0 |
| 180° | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 |

REPORT NUMBER: P227542

CATALOG NUMBER: ISS-AF-450-LED-E1-T2-7060-ULG

CANDELA DISTRIBUTION (continued):

| | 52.5° | 55° | 57.5° | 60° | 62.5° | 65° | 67.5° | 70° | 72.5° | 75° | 77° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 |
| 2.5° | 408.6 | 410.5 | 406.6 | 406.6 | 401.6 | 404.6 | 399.7 | 400.6 | 395.7 | 397.7 | 397.7 |
| 5° | 428.3 | 429.3 | 424.4 | 422.4 | 417.5 | 417.5 | 412.5 | 412.5 | 405.6 | 407.6 | 405.6 |
| 7.5° | 447.1 | 447.1 | 442.2 | 438.2 | 433.3 | 431.3 | 425.4 | 422.4 | 416.5 | 415.5 | 412.5 |
| 10° | 463.0 | 463.0 | 456.0 | 452.1 | 446.1 | 443.2 | 435.3 | 432.3 | 425.4 | 420.4 | 417.5 |
| 12.5° | 482.8 | 480.8 | 472.9 | 468.9 | 459.0 | 458.0 | 446.1 | 444.2 | 434.3 | 431.3 | 426.4 |
| 15° | 506.5 | 508.5 | 495.6 | 494.6 | 480.8 | 479.8 | 464.0 | 463.0 | 448.1 | 447.1 | 440.2 |
| 17.5° | 532.2 | 536.2 | 525.3 | 524.3 | 507.5 | 507.5 | 488.7 | 487.7 | 467.9 | 466.9 | 458.0 |
| 20° | 555.0 | 559.9 | 553.0 | 555.0 | 540.1 | 541.1 | 520.3 | 520.3 | 492.6 | 490.7 | 482.8 |
| 22.5° | 575.7 | 585.6 | 579.7 | 590.6 | 575.7 | 582.7 | 555.0 | 559.9 | 527.3 | 523.3 | 511.4 |
| 25° | 596.5 | 609.4 | 607.4 | 625.2 | 614.3 | 626.2 | 597.5 | 607.4 | 564.9 | 567.8 | 552.0 |
| 27.5° | 617.3 | 634.1 | 632.1 | 657.8 | 653.9 | 677.6 | 652.9 | 663.8 | 617.3 | 620.3 | 602.4 |
| 30° | 651.9 | 670.7 | 663.8 | 690.5 | 690.5 | 729.1 | 710.3 | 727.1 | 675.7 | 681.6 | 660.8 |
| 32.5° | 698.4 | 720.2 | 699.4 | 734.0 | 732.0 | 782.5 | 767.7 | 796.3 | 745.9 | 753.8 | 728.1 |
| 35° | 748.9 | 783.5 | 749.8 | 788.4 | 782.5 | 834.9 | 825.0 | 871.5 | 818.1 | 827.0 | 801.3 |
| 37.5° | 815.1 | 856.7 | 812.2 | 845.8 | 819.1 | 879.4 | 873.5 | 936.8 | 882.4 | 905.2 | 874.5 |
| 40° | 893.3 | 925.9 | 870.5 | 899.2 | 854.7 | 917.0 | 907.1 | 994.2 | 943.7 | 980.3 | 952.6 |
| 42.5° | 965.5 | 988.3 | 915.1 | 950.7 | 897.2 | 960.6 | 942.7 | 1047.6 | 1004.1 | 1060.5 | 1029.8 |
| 45° | 1030.8 | 1056.5 | 959.6 | 999.1 | 939.8 | 1009.0 | 978.4 | 1099.1 | 1069.4 | 1154.4 | 1123.8 |
| 47.5° | 1123.8 | 1086.2 | 1000.1 | 1051.6 | 985.3 | 1061.5 | 1020.9 | 1159.4 | 1148.5 | 1269.2 | 1233.6 |
| 50° | 1093.1 | 1117.8 | 1033.8 | 1087.2 | 1026.8 | 1119.8 | 1075.3 | 1231.6 | 1234.6 | 1393.8 | 1373.1 |
| 52.5° | 1096.1 | 1137.6 | 1059.5 | 1133.7 | 1075.3 | 1200.9 | 1154.4 | 1318.7 | 1332.5 | 1514.5 | 1485.8 |
| 55° | 1113.9 | 1175.2 | 1098.1 | 1198.0 | 1143.6 | 1291.0 | 1258.3 | 1412.6 | 1436.4 | 1628.3 | 1611.5 |
| 57.5° | 1158.4 | 1243.5 | 1164.3 | 1294.9 | 1238.5 | 1393.8 | 1364.2 | 1509.6 | 1542.2 | 1742.1 | 1737.1 |
| 60° | 1329.5 | 1430.4 | 1292.0 | 1436.4 | 1361.2 | 1510.6 | 1471.0 | 1611.5 | 1644.1 | 1850.9 | 1863.7 |
| 62.5° | 1520.5 | 1695.6 | 1613.5 | 1763.8 | 1565.0 | 1716.3 | 1599.6 | 1737.1 | 1739.1 | 1967.6 | 2008.2 |
| 65° | 1569.9 | 1839.0 | 1909.2 | 2189.2 | 2085.3 | 2240.6 | 1929.0 | 2021.0 | 1902.3 | 2180.3 | 2238.7 |
| 67.5° | 1551.1 | 1880.6 | 2075.4 | 2391.0 | 2508.7 | 2779.8 | 2727.3 | 2695.7 | 2420.7 | 2620.5 | 2690.7 |
| 70° | 1138.6 | 1487.8 | 1964.6 | 2285.2 | 2624.5 | 2802.5 | 3084.5 | 3113.2 | 3101.3 | 3073.6 | 3120.1 |
| 72.5° | 518.4 | 813.2 | 1329.5 | 1695.6 | 2255.5 | 2375.2 | 2783.7 | 2775.8 | 3195.3 | 3091.4 | 3164.6 |
| 75° | 203.8 | 313.6 | 633.1 | 946.7 | 1560.0 | 1707.4 | 2170.4 | 2055.6 | 2579.0 | 2426.6 | 2582.9 |
| 77.5° | 111.8 | 140.5 | 237.4 | 406.6 | 851.7 | 929.9 | 1328.6 | 1136.6 | 1599.6 | 1335.5 | 1387.9 |
| 80° | 67.3 | 84.1 | 108.8 | 154.3 | 362.1 | 382.8 | 566.8 | 457.0 | 653.9 | 496.6 | 481.8 |
| 82.5° | 36.6 | 45.5 | 54.4 | 76.2 | 134.5 | 149.4 | 195.9 | 176.1 | 209.7 | 179.1 | 175.1 |
| 85° | 14.8 | 19.8 | 20.8 | 30.7 | 44.5 | 51.4 | 62.3 | 67.3 | 82.1 | 75.2 | 73.2 |
| 87.5° | 0.0 | 1.0 | 0.0 | 2.0 | 0.0 | 2.0 | 0.0 | 3.0 | 3.0 | 4.9 | 5.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 95° | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 97.5° | 12.0 | 13.0 | 11.5 | 10.0 | 8.5 | 7.0 | 6.5 | 6.0 | 5.5 | 5.0 | 4.8 |
| 100° | 31.5 | 32.0 | 31.5 | 31.0 | 30.5 | 30.0 | 29.2 | 28.5 | 27.8 | 27.0 | 26.8 |
| 102.5° | 50.8 | 51.0 | 50.8 | 50.5 | 50.2 | 50.0 | 49.5 | 49.0 | 48.5 | 48.0 | 48.2 |
| 105° | 70.8 | 71.0 | 71.0 | 71.0 | 71.0 | 71.0 | 70.5 | 70.0 | 69.5 | 69.0 | 69.4 |
| 107.5° | 92.5 | 93.0 | 92.8 | 92.5 | 92.2 | 92.0 | 91.8 | 91.5 | 91.2 | 91.0 | 91.2 |
| 110° | 113.5 | 114.0 | 114.0 | 114.0 | 114.0 | 114.0 | 113.8 | 113.5 | 113.2 | 113.0 | 113.2 |



REPORT NUMBER: P227542

CATALOG NUMBER: ISS-AF-450-LED-E1-T2-7060-ULG

CANDELA DISTRIBUTION (continued):

| | 52.5° | 55° | 57.5° | 60° | 62.5° | 65° | 67.5° | 70° | 72.5° | 75° | 77° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 135.5 | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 | 135.8 | 135.5 | 135.2 | 135.0 | 135.4 |
| 115° | 157.5 | 158.0 | 158.0 | 158.0 | 158.0 | 158.0 | 158.0 | 158.0 | 158.0 | 158.0 | 158.4 |
| 117.5° | 179.8 | 180.0 | 180.2 | 180.5 | 180.8 | 181.0 | 180.8 | 180.5 | 180.2 | 180.0 | 180.4 |
| 120° | 203.5 | 204.0 | 204.0 | 204.0 | 204.0 | 204.0 | 204.0 | 204.0 | 204.0 | 204.0 | 204.4 |
| 122.5° | 227.8 | 228.0 | 228.0 | 228.0 | 228.0 | 228.0 | 228.2 | 228.5 | 228.8 | 229.0 | 229.8 |
| 125° | 252.8 | 253.0 | 253.2 | 253.5 | 253.8 | 254.0 | 254.0 | 254.0 | 254.0 | 254.0 | 254.6 |
| 127.5° | 277.5 | 278.0 | 277.8 | 277.5 | 277.2 | 277.0 | 277.2 | 277.5 | 277.8 | 278.0 | 278.6 |
| 130° | 300.5 | 301.0 | 301.0 | 301.0 | 301.0 | 301.0 | 301.2 | 301.5 | 301.8 | 302.0 | 302.6 |
| 132.5° | 324.2 | 325.0 | 325.0 | 325.0 | 325.0 | 325.0 | 325.2 | 325.5 | 325.8 | 326.0 | 326.6 |
| 135° | 347.2 | 348.0 | 348.0 | 348.0 | 348.0 | 348.0 | 348.2 | 348.5 | 348.8 | 349.0 | 349.4 |
| 137.5° | 368.5 | 369.0 | 369.0 | 369.0 | 369.0 | 369.0 | 369.2 | 369.5 | 369.8 | 370.0 | 370.8 |
| 140° | 389.8 | 390.0 | 390.0 | 390.0 | 390.0 | 390.0 | 390.5 | 391.0 | 391.5 | 392.0 | 392.8 |
| 142.5° | 411.5 | 412.0 | 412.0 | 412.0 | 412.0 | 412.0 | 412.2 | 412.5 | 412.8 | 413.0 | 413.6 |
| 145° | 433.5 | 434.0 | 433.8 | 433.5 | 433.2 | 433.0 | 433.2 | 433.5 | 433.8 | 434.0 | 434.6 |
| 147.5° | 453.8 | 454.0 | 453.5 | 453.0 | 452.5 | 452.0 | 452.2 | 452.5 | 452.8 | 453.0 | 453.6 |
| 150° | 470.8 | 471.0 | 470.5 | 470.0 | 469.5 | 469.0 | 469.0 | 469.0 | 469.0 | 469.0 | 469.8 |
| 152.5° | 486.8 | 487.0 | 486.8 | 486.5 | 486.2 | 486.0 | 486.0 | 486.0 | 486.0 | 486.0 | 486.6 |
| 155° | 503.8 | 504.0 | 503.8 | 503.5 | 503.2 | 503.0 | 503.2 | 503.5 | 503.8 | 504.0 | 504.6 |
| 157.5° | 519.0 | 519.0 | 518.5 | 518.0 | 517.5 | 517.0 | 517.2 | 517.5 | 517.8 | 518.0 | 519.0 |
| 160° | 532.0 | 532.0 | 531.5 | 531.0 | 530.5 | 530.0 | 530.0 | 530.0 | 530.0 | 530.0 | 530.6 |
| 162.5° | 541.8 | 542.0 | 541.5 | 541.0 | 540.5 | 540.0 | 539.5 | 539.0 | 538.5 | 538.0 | 538.4 |
| 165° | 552.8 | 553.0 | 552.2 | 551.5 | 550.8 | 550.0 | 549.5 | 549.0 | 548.5 | 548.0 | 548.4 |
| 167.5° | 560.0 | 560.0 | 559.5 | 559.0 | 558.5 | 558.0 | 558.2 | 558.5 | 558.8 | 559.0 | 559.8 |
| 170° | 565.2 | 565.0 | 564.8 | 564.5 | 564.2 | 564.0 | 564.5 | 565.0 | 565.5 | 566.0 | 567.0 |
| 172.5° | 568.8 | 569.0 | 568.5 | 568.0 | 567.5 | 567.0 | 567.2 | 567.5 | 567.8 | 568.0 | 568.6 |
| 175° | 572.8 | 573.0 | 572.2 | 571.5 | 570.8 | 570.0 | 569.5 | 569.0 | 568.5 | 568.0 | 568.6 |
| 177.5° | 577.0 | 577.0 | 576.2 | 575.5 | 574.8 | 574.0 | 574.0 | 574.0 | 574.0 | 574.0 | 574.6 |
| 180° | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 |



REPORT NUMBER: P227542

CATALOG NUMBER: ISS-AF-450-LED-E1-T2-7060-ULG

CANDELA DISTRIBUTION (continued):

| | 77.5° | 80° | 82.5° | 85° | 87.5° | 90° | 95° | 100° | 102.5° | 105° | 107.5° |
|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------|-------|--------|
| 0° | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 |
| 2.5° | 394.7 | 397.7 | 393.7 | 393.7 | 388.8 | 391.7 | 388.8 | 385.8 | 380.9 | 381.8 | 374.9 |
| 5° | 401.6 | 403.6 | 398.7 | 396.7 | 393.7 | 392.7 | 386.8 | 380.9 | 373.9 | 373.9 | 366.0 |
| 7.5° | 408.6 | 408.6 | 401.6 | 401.6 | 394.7 | 392.7 | 383.8 | 373.9 | 364.0 | 363.1 | 351.2 |
| 10° | 412.5 | 411.5 | 402.6 | 402.6 | 392.7 | 391.7 | 380.9 | 366.0 | 352.2 | 348.2 | 331.4 |
| 12.5° | 420.4 | 419.4 | 408.6 | 406.6 | 393.7 | 393.7 | 377.9 | 358.1 | 338.3 | 331.4 | 307.7 |
| 15° | 430.3 | 431.3 | 418.5 | 415.5 | 400.6 | 399.7 | 377.9 | 348.2 | 321.5 | 310.6 | 281.9 |
| 17.5° | 446.1 | 447.1 | 429.3 | 426.4 | 408.6 | 405.6 | 378.9 | 336.3 | 298.8 | 286.9 | 261.2 |
| 20° | 466.9 | 464.0 | 440.2 | 439.2 | 415.5 | 412.5 | 377.9 | 318.5 | 276.0 | 264.1 | 241.4 |
| 22.5° | 492.6 | 489.7 | 459.0 | 456.0 | 428.3 | 423.4 | 376.9 | 299.7 | 255.2 | 242.4 | 227.5 |
| 25° | 528.3 | 524.3 | 486.7 | 482.8 | 448.1 | 440.2 | 375.9 | 280.0 | 237.4 | 227.5 | 218.6 |
| 27.5° | 572.8 | 564.9 | 519.4 | 515.4 | 468.9 | 459.0 | 372.0 | 257.2 | 219.6 | 212.7 | 208.7 |
| 30° | 626.2 | 619.3 | 560.9 | 555.0 | 496.6 | 483.7 | 368.0 | 236.4 | 206.8 | 203.8 | 200.8 |
| 32.5° | 689.5 | 682.6 | 611.4 | 604.4 | 532.2 | 513.4 | 361.1 | 219.6 | 198.8 | 198.8 | 194.9 |
| 35° | 755.8 | 749.8 | 665.8 | 660.8 | 571.8 | 547.1 | 352.2 | 204.8 | 191.9 | 191.9 | 188.0 |
| 37.5° | 815.1 | 820.1 | 725.1 | 721.2 | 611.4 | 580.7 | 342.3 | 194.9 | 186.0 | 184.0 | 180.0 |
| 40° | 879.4 | 891.3 | 780.5 | 783.5 | 652.9 | 616.3 | 330.4 | 187.0 | 179.1 | 177.1 | 176.1 |
| 42.5° | 944.7 | 967.5 | 838.9 | 849.8 | 694.4 | 652.9 | 321.5 | 182.0 | 176.1 | 172.1 | 171.1 |
| 45° | 1025.8 | 1058.5 | 911.1 | 931.9 | 742.9 | 697.4 | 318.5 | 176.1 | 167.2 | 162.2 | 159.3 |
| 47.5° | 1126.7 | 1170.3 | 1000.1 | 1023.9 | 807.2 | 750.8 | 324.5 | 174.1 | 161.2 | 155.3 | 149.4 |
| 50° | 1246.4 | 1288.0 | 1106.0 | 1115.9 | 879.4 | 809.2 | 337.3 | 177.1 | 159.3 | 150.4 | 141.5 |
| 52.5° | 1373.1 | 1404.7 | 1217.8 | 1206.9 | 954.6 | 866.6 | 352.2 | 178.1 | 154.3 | 145.4 | 134.5 |
| 55° | 1503.7 | 1521.5 | 1321.6 | 1292.9 | 1022.9 | 924.0 | 372.0 | 177.1 | 150.4 | 140.5 | 126.6 |
| 57.5° | 1631.3 | 1637.2 | 1413.6 | 1385.9 | 1090.1 | 992.2 | 396.7 | 174.1 | 144.4 | 134.5 | 119.7 |
| 60° | 1755.9 | 1765.8 | 1515.5 | 1489.8 | 1163.4 | 1080.3 | 432.3 | 169.2 | 136.5 | 129.6 | 113.8 |
| 62.5° | 1892.4 | 1925.1 | 1637.2 | 1641.2 | 1264.3 | 1217.8 | 499.6 | 163.2 | 128.6 | 120.7 | 104.9 |
| 65° | 2078.4 | 2203.0 | 1838.0 | 1931.0 | 1458.1 | 1476.9 | 628.2 | 146.4 | 117.7 | 107.8 | 96.9 |
| 67.5° | 2544.3 | 2680.9 | 2325.7 | 2363.3 | 1912.2 | 1800.4 | 709.3 | 124.6 | 103.9 | 96.9 | 90.0 |
| 70° | 3128.0 | 3030.1 | 2777.8 | 2550.3 | 2177.3 | 1850.9 | 624.2 | 104.9 | 92.0 | 88.0 | 84.1 |
| 72.5° | 3288.2 | 2937.1 | 2729.3 | 2388.0 | 2013.1 | 1614.4 | 477.8 | 90.0 | 82.1 | 80.1 | 77.2 |
| 75° | 2889.6 | 2381.1 | 2393.0 | 1897.4 | 1668.9 | 1230.6 | 326.5 | 77.2 | 71.2 | 70.2 | 69.2 |
| 77.5° | 1847.9 | 1223.7 | 1489.8 | 937.8 | 963.5 | 569.8 | 159.3 | 64.3 | 61.3 | 61.3 | 59.4 |
| 80° | 656.9 | 407.6 | 461.0 | 295.8 | 269.1 | 181.0 | 86.1 | 51.4 | 49.5 | 50.5 | 49.5 |
| 82.5° | 196.9 | 156.3 | 153.3 | 119.7 | 93.0 | 76.2 | 47.5 | 39.6 | 37.6 | 38.6 | 36.6 |
| 85° | 79.1 | 61.3 | 51.4 | 39.6 | 32.6 | 29.7 | 25.7 | 26.7 | 23.7 | 25.7 | 22.8 |
| 87.5° | 4.9 | 4.0 | 3.0 | 4.0 | 0.0 | 2.0 | 4.9 | 4.0 | 1.0 | 4.0 | 3.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 95° | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 97.5° | 4.8 | 4.5 | 4.2 | 4.0 | 4.0 | 4.0 | 4.0 | 4.5 | 4.8 | 5.0 | 5.5 |
| 100° | 26.8 | 26.5 | 26.2 | 26.0 | 25.5 | 25.0 | 26.0 | 26.5 | 26.8 | 27.0 | 27.8 |
| 102.5° | 48.2 | 48.5 | 48.8 | 49.0 | 48.5 | 48.0 | 49.0 | 48.5 | 48.2 | 48.0 | 48.5 |
| 105° | 69.5 | 70.0 | 70.5 | 71.0 | 70.0 | 69.0 | 71.0 | 70.0 | 69.5 | 69.0 | 69.5 |
| 107.5° | 91.2 | 91.5 | 91.8 | 92.0 | 91.5 | 91.0 | 92.0 | 91.5 | 91.2 | 91.0 | 91.2 |
| 110° | 113.2 | 113.5 | 113.8 | 114.0 | 113.5 | 113.0 | 114.0 | 113.5 | 113.2 | 113.0 | 113.2 |



REPORT NUMBER: P227542
 CATALOG NUMBER: ISS-AF-450-LED-E1-T2-7060-ULG

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

| | 77.5° | 80° | 82.5° | 85° | 87.5° | 90° | 95° | 100° | 102.5° | 105° | 107.5° | |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|--------|--------|
| 112.5° | 135.5 | 136.0 | 136.5 | 137.0 | 136.0 | 135.0 | 137.0 | 136.0 | 135.5 | 135.0 | 135.2 | 0° |
| 115° | 158.5 | 159.0 | 159.5 | 160.0 | 159.5 | 159.0 | 160.0 | 159.0 | 158.5 | 158.0 | 158.0 | 2.5° |
| 117.5° | 180.5 | 181.0 | 181.5 | 182.0 | 181.0 | 180.0 | 182.0 | 181.0 | 180.5 | 180.0 | 180.2 | 5° |
| 120° | 204.5 | 205.0 | 205.5 | 206.0 | 205.0 | 204.0 | 206.0 | 205.0 | 204.5 | 204.0 | 204.0 | 7.5° |
| 122.5° | 230.0 | 231.0 | 232.0 | 233.0 | 232.5 | 232.0 | 233.0 | 231.0 | 230.0 | 229.0 | 228.8 | 10° |
| 125° | 254.8 | 255.5 | 256.2 | 257.0 | 256.5 | 256.0 | 257.0 | 255.5 | 254.8 | 254.0 | 254.0 | 12.5° |
| 127.5° | 278.8 | 279.5 | 280.2 | 281.0 | 279.5 | 278.0 | 281.0 | 279.5 | 278.8 | 278.0 | 277.8 | 15° |
| 130° | 302.8 | 303.5 | 304.2 | 305.0 | 304.0 | 303.0 | 305.0 | 303.5 | 302.8 | 302.0 | 301.8 | 17.5° |
| 132.5° | 326.8 | 327.5 | 328.2 | 329.0 | 328.0 | 327.0 | 329.0 | 327.5 | 326.8 | 326.0 | 325.8 | 20° |
| 135° | 349.5 | 350.0 | 350.5 | 351.0 | 350.5 | 350.0 | 351.0 | 350.0 | 349.5 | 349.0 | 348.8 | 22.5° |
| 137.5° | 371.0 | 372.0 | 373.0 | 374.0 | 373.0 | 372.0 | 374.0 | 372.0 | 371.0 | 370.0 | 369.8 | 25° |
| 140° | 393.0 | 394.0 | 395.0 | 396.0 | 395.0 | 394.0 | 396.0 | 394.0 | 393.0 | 392.0 | 391.5 | 27.5° |
| 142.5° | 413.8 | 414.5 | 415.2 | 416.0 | 415.5 | 415.0 | 416.0 | 414.5 | 413.8 | 413.0 | 412.8 | 30° |
| 145° | 434.8 | 435.5 | 436.2 | 437.0 | 436.0 | 435.0 | 437.0 | 435.5 | 434.8 | 434.0 | 433.8 | 32.5° |
| 147.5° | 453.8 | 454.5 | 455.2 | 456.0 | 454.5 | 453.0 | 456.0 | 454.5 | 453.8 | 453.0 | 452.8 | 35° |
| 150° | 470.0 | 471.0 | 472.0 | 473.0 | 471.5 | 470.0 | 473.0 | 471.0 | 470.0 | 469.0 | 469.0 | 37.5° |
| 152.5° | 486.8 | 487.5 | 488.2 | 489.0 | 487.5 | 486.0 | 489.0 | 487.5 | 486.8 | 486.0 | 486.0 | 40° |
| 155° | 504.8 | 505.5 | 506.2 | 507.0 | 506.0 | 505.0 | 507.0 | 505.5 | 504.8 | 504.0 | 503.8 | 42.5° |
| 157.5° | 519.2 | 520.5 | 521.8 | 523.0 | 521.5 | 520.0 | 523.0 | 520.5 | 519.2 | 518.0 | 517.8 | 45° |
| 160° | 530.8 | 531.5 | 532.2 | 533.0 | 532.0 | 531.0 | 533.0 | 531.5 | 530.8 | 530.0 | 530.0 | 47.5° |
| 162.5° | 538.5 | 539.0 | 539.5 | 540.0 | 538.5 | 537.0 | 540.0 | 539.0 | 538.5 | 538.0 | 538.5 | 50° |
| 165° | 548.5 | 549.0 | 549.5 | 550.0 | 549.0 | 548.0 | 550.0 | 549.0 | 548.5 | 548.0 | 548.5 | 52.5° |
| 167.5° | 560.0 | 561.0 | 562.0 | 563.0 | 562.0 | 561.0 | 563.0 | 561.0 | 560.0 | 559.0 | 558.8 | 55° |
| 170° | 567.2 | 568.5 | 569.8 | 571.0 | 570.0 | 569.0 | 571.0 | 568.5 | 567.2 | 566.0 | 565.5 | 57.5° |
| 172.5° | 568.8 | 569.5 | 570.2 | 571.0 | 569.5 | 568.0 | 571.0 | 569.5 | 568.8 | 568.0 | 567.8 | 60° |
| 175° | 568.8 | 569.5 | 570.2 | 571.0 | 569.5 | 568.0 | 571.0 | 569.5 | 568.8 | 568.0 | 568.5 | 62.5° |
| 177.5° | 574.8 | 575.5 | 576.2 | 577.0 | 575.5 | 574.0 | 577.0 | 575.5 | 574.8 | 574.0 | 574.0 | 65° |
| 180° | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 67.5° |
| | | | | | | | | | | | | 70° |
| | | | | | | | | | | | | 72.5° |
| | | | | | | | | | | | | 75° |
| | | | | | | | | | | | | 77.5° |
| | | | | | | | | | | | | 80° |
| | | | | | | | | | | | | 82.5° |
| | | | | | | | | | | | | 85° |
| | | | | | | | | | | | | 87.5° |
| | | | | | | | | | | | | 90° |
| | | | | | | | | | | | | 92.5° |
| | | | | | | | | | | | | 95° |
| | | | | | | | | | | | | 97.5° |
| | | | | | | | | | | | | 100° |
| | | | | | | | | | | | | 102.5° |
| | | | | | | | | | | | | 105° |
| | | | | | | | | | | | | 107.5° |
| | | | | | | | | | | | | 110° |

NUMBER: P227542
 NUMBER: ISS-AF-450-LED-E1-T2-7060-ULG

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

CANDELA DISTRIBUTION

| 110° | 112.5° | 115° | 117.5° | 120° | 122.5° | 125° | 127.5° | 130° | 135° | 145° | 110° | |
|-------|--------|-------|--------|-------|--------|-------|--------|-------|-------|-------|--------|-------|
| 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 391.7 | 112.5° | 135.5 |
| 379.9 | 372.9 | 375.9 | 372.9 | 374.9 | 369.0 | 371.0 | 366.0 | 366.0 | 365.0 | 360.1 | 115° | 158.0 |
| 367.0 | 360.1 | 359.1 | 352.2 | 353.2 | 345.2 | 344.3 | 335.4 | 335.4 | 327.4 | 312.6 | 117.5° | 180.5 |
| 349.2 | 338.3 | 337.3 | 323.5 | 322.5 | 311.6 | 307.7 | 297.8 | 296.8 | 287.9 | 279.0 | 120° | 204.0 |
| 326.5 | 309.6 | 306.7 | 288.9 | 289.8 | 278.0 | 277.0 | 270.1 | 270.1 | 266.1 | 266.1 | 122.5° | 228.5 |
| 300.7 | 281.9 | 280.0 | 266.1 | 267.1 | 259.2 | 260.2 | 256.2 | 258.2 | 260.2 | 267.1 | 125° | 254.0 |
| 277.0 | 262.1 | 260.2 | 251.3 | 252.3 | 250.3 | 253.2 | 253.2 | 256.2 | 261.2 | 273.0 | 127.5° | 277.5 |
| 257.2 | 244.3 | 245.3 | 241.4 | 245.3 | 244.3 | 250.3 | 249.3 | 255.2 | 261.2 | 276.0 | 130° | 301.5 |
| 239.4 | 232.5 | 235.4 | 234.5 | 239.4 | 239.4 | 244.3 | 245.3 | 250.3 | 258.2 | 275.0 | 132.5° | 325.5 |
| 227.5 | 225.5 | 228.5 | 228.5 | 232.5 | 233.5 | 238.4 | 241.4 | 244.3 | 252.3 | 267.1 | 135° | 348.5 |
| 220.6 | 219.6 | 222.6 | 223.6 | 226.5 | 227.5 | 232.5 | 232.5 | 237.4 | 242.4 | 250.3 | 137.5° | 369.5 |
| 210.7 | 208.7 | 212.7 | 212.7 | 216.6 | 215.7 | 221.6 | 219.6 | 224.6 | 226.5 | 228.5 | 140° | 391.0 |
| 203.8 | 200.8 | 203.8 | 202.8 | 205.8 | 202.8 | 205.8 | 202.8 | 205.8 | 205.8 | 202.8 | 142.5° | 412.5 |
| 196.9 | 193.9 | 194.9 | 190.9 | 193.9 | 189.9 | 190.9 | 187.0 | 188.9 | 187.0 | 188.0 | 145° | 433.5 |
| 189.9 | 186.0 | 186.0 | 181.0 | 181.0 | 176.1 | 178.1 | 174.1 | 178.1 | 181.0 | 180.0 | 147.5° | 452.5 |
| 180.0 | 177.1 | 177.1 | 173.1 | 175.1 | 173.1 | 177.1 | 175.1 | 176.1 | 172.1 | 165.2 | 150° | 469.0 |
| 174.1 | 176.1 | 175.1 | 178.1 | 176.1 | 173.1 | 170.1 | 164.2 | 163.2 | 161.2 | 157.3 | 152.5° | 486.0 |
| 165.2 | 167.2 | 162.2 | 166.2 | 163.2 | 164.2 | 162.2 | 159.3 | 157.3 | 155.3 | 151.4 | 155° | 503.5 |
| 152.3 | 152.3 | 148.4 | 154.3 | 151.4 | 157.3 | 155.3 | 155.3 | 153.3 | 150.4 | 147.4 | 157.5° | 517.5 |
| 141.5 | 142.5 | 138.5 | 143.4 | 141.5 | 149.4 | 148.4 | 151.4 | 151.4 | 149.4 | 141.5 | 160° | 530.0 |
| 134.5 | 132.6 | 129.6 | 134.5 | 133.5 | 140.5 | 141.5 | 147.4 | 146.4 | 147.4 | 140.5 | 162.5° | 539.0 |
| 128.6 | 124.6 | 121.7 | 124.6 | 124.6 | 130.6 | 132.6 | 139.5 | 140.5 | 142.5 | 138.5 | 165° | 549.0 |
| 121.7 | 116.7 | 114.8 | 116.7 | 116.7 | 122.7 | 125.6 | 130.6 | 133.5 | 139.5 | 137.5 | 167.5° | 558.5 |
| 115.7 | 108.8 | 106.8 | 108.8 | 109.8 | 115.7 | 118.7 | 123.7 | 127.6 | 135.5 | 134.5 | 170° | 565.0 |
| 108.8 | 102.9 | 100.9 | 103.9 | 104.9 | 110.8 | 113.8 | 118.7 | 121.7 | 130.6 | 130.6 | 172.5° | 567.5 |
| 100.9 | 96.0 | 96.0 | 96.9 | 98.9 | 104.9 | 106.8 | 113.8 | 114.8 | 125.6 | 126.6 | 175° | 569.0 |
| 94.0 | 91.0 | 91.0 | 92.0 | 94.0 | 98.9 | 99.9 | 106.8 | 107.8 | 118.7 | 121.7 | 177.5° | 574.0 |
| 88.0 | 86.1 | 86.1 | 87.1 | 88.0 | 92.0 | 93.0 | 99.9 | 101.9 | 111.8 | 116.7 | 180° | 576.0 |
| 82.1 | 80.1 | 79.1 | 79.1 | 82.1 | 85.1 | 87.1 | 94.0 | 95.0 | 103.9 | 109.8 | | |
| 75.2 | 73.2 | 73.2 | 72.2 | 75.2 | 77.2 | 81.1 | 85.1 | 87.1 | 96.0 | 99.9 | | |
| 68.3 | 66.3 | 66.3 | 65.3 | 67.3 | 71.2 | 72.2 | 76.2 | 77.2 | 85.1 | 89.0 | | |
| 59.4 | 57.4 | 57.4 | 57.4 | 59.4 | 60.3 | 61.3 | 65.3 | 67.3 | 74.2 | 78.2 | | |
| 49.5 | 47.5 | 48.5 | 47.5 | 50.5 | 46.5 | 49.5 | 53.4 | 55.4 | 59.4 | 57.4 | | |
| 37.6 | 34.6 | 35.6 | 35.6 | 36.6 | 33.6 | 35.6 | 37.6 | 39.6 | 42.5 | 41.5 | | |
| 23.7 | 20.8 | 22.8 | 20.8 | 22.8 | 19.8 | 21.8 | 21.8 | 23.7 | 21.8 | 20.8 | | |
| 4.9 | 2.0 | 4.9 | 2.0 | 5.9 | 0.0 | 3.0 | 0.0 | 2.0 | 1.0 | 0.0 | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | | |
| 6.0 | 6.5 | 7.0 | 8.5 | 10.0 | 11.5 | 13.0 | 12.0 | 11.0 | 9.0 | 4.0 | | |
| 28.5 | 29.2 | 30.0 | 30.5 | 31.0 | 31.5 | 32.0 | 31.5 | 31.0 | 30.0 | 22.0 | | |
| 49.0 | 49.5 | 50.0 | 50.2 | 50.5 | 50.8 | 51.0 | 50.8 | 50.5 | 50.0 | 45.0 | | |
| 70.0 | 70.5 | 71.0 | 71.0 | 71.0 | 71.0 | 71.0 | 70.8 | 70.5 | 70.0 | 66.0 | | |
| 91.5 | 91.8 | 92.0 | 92.2 | 92.5 | 92.8 | 93.0 | 92.5 | 92.0 | 91.0 | 88.0 | | |
| 113.5 | 113.8 | 114.0 | 114.0 | 114.0 | 114.0 | 114.0 | 113.5 | 113.0 | 112.0 | 110.0 | | |

'227542
 ISS-AF-450-LED-E1-T2-7060-ULG

REPORT NUMBER: P227542
 CATALOG NUMBER: ISS-AF-450

TION (continued):

CANDELA DISTRIBUTION (con

| 112.5° | 115° | 117.5° | 120° | 122.5° | 125° | 127.5° | 130° | 135° | 145° | | 155° | 165° |
|--------|-------|--------|-------|--------|-------|--------|-------|-------|-------|--------|-------|-------|
| 135.8 | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 | 135.5 | 135.0 | 134.0 | 132.0 | 0° | 391.7 | 391.7 |
| 158.0 | 158.0 | 158.0 | 158.0 | 158.0 | 158.0 | 157.5 | 157.0 | 156.0 | 154.0 | 2.5° | 355.1 | 351.2 |
| 180.8 | 181.0 | 180.8 | 180.5 | 180.2 | 180.0 | 179.8 | 179.5 | 179.0 | 177.0 | 5° | 304.7 | 297.8 |
| 204.0 | 204.0 | 204.0 | 204.0 | 204.0 | 204.0 | 203.5 | 203.0 | 202.0 | 201.0 | 7.5° | 274.0 | 272.0 |
| 228.2 | 228.0 | 228.0 | 228.0 | 228.0 | 228.0 | 227.8 | 227.5 | 227.0 | 226.0 | 10° | 268.1 | 271.1 |
| 254.0 | 254.0 | 253.8 | 253.5 | 253.2 | 253.0 | 252.8 | 252.5 | 252.0 | 251.0 | 12.5° | 275.0 | 280.0 |
| 277.2 | 277.0 | 277.2 | 277.5 | 277.8 | 278.0 | 277.5 | 277.0 | 276.0 | 274.0 | 15° | 283.9 | 292.8 |
| 301.2 | 301.0 | 301.0 | 301.0 | 301.0 | 301.0 | 300.5 | 300.0 | 299.0 | 298.0 | 17.5° | 290.8 | 302.7 |
| 325.2 | 325.0 | 325.0 | 325.0 | 325.0 | 325.0 | 324.2 | 323.5 | 322.0 | 321.0 | 20° | 291.8 | 303.7 |
| 348.2 | 348.0 | 348.0 | 348.0 | 348.0 | 348.0 | 347.2 | 346.5 | 345.0 | 345.0 | 22.5° | 282.9 | 290.8 |
| 369.2 | 369.0 | 369.0 | 369.0 | 369.0 | 369.0 | 368.5 | 368.0 | 367.0 | 367.0 | 25° | 260.2 | 264.1 |
| 390.5 | 390.0 | 390.0 | 390.0 | 390.0 | 390.0 | 389.8 | 389.5 | 389.0 | 388.0 | 27.5° | 231.5 | 230.5 |
| 412.2 | 412.0 | 412.0 | 412.0 | 412.0 | 412.0 | 411.5 | 411.0 | 410.0 | 410.0 | 30° | 201.8 | 199.8 |
| 433.2 | 433.0 | 433.2 | 433.5 | 433.8 | 434.0 | 433.5 | 433.0 | 432.0 | 431.0 | 32.5° | 190.9 | 184.0 |
| 452.2 | 452.0 | 452.5 | 453.0 | 453.5 | 454.0 | 453.8 | 453.5 | 453.0 | 452.0 | 35° | 174.1 | 172.1 |
| 469.0 | 469.0 | 469.5 | 470.0 | 470.5 | 471.0 | 470.8 | 470.5 | 470.0 | 469.0 | 37.5° | 168.2 | 185.0 |
| 486.0 | 486.0 | 486.2 | 486.5 | 486.8 | 487.0 | 486.8 | 486.5 | 486.0 | 485.0 | 40° | 161.2 | 182.0 |
| 503.2 | 503.0 | 503.2 | 503.5 | 503.8 | 504.0 | 503.8 | 503.5 | 503.0 | 503.0 | 42.5° | 155.3 | 167.2 |
| 517.2 | 517.0 | 517.5 | 518.0 | 518.5 | 519.0 | 519.0 | 519.0 | 519.0 | 519.0 | 45° | 144.4 | 149.4 |
| 530.0 | 530.0 | 530.5 | 531.0 | 531.5 | 532.0 | 532.0 | 532.0 | 532.0 | 532.0 | 47.5° | 139.5 | 137.5 |
| 539.5 | 540.0 | 540.5 | 541.0 | 541.5 | 542.0 | 541.8 | 541.5 | 541.0 | 541.0 | 50° | 135.5 | 135.5 |
| 549.5 | 550.0 | 550.8 | 551.5 | 552.2 | 553.0 | 552.8 | 552.5 | 552.0 | 552.0 | 52.5° | 132.6 | 130.6 |
| 558.2 | 558.0 | 558.5 | 559.0 | 559.5 | 560.0 | 560.0 | 560.0 | 560.0 | 561.0 | 55° | 128.6 | 126.6 |
| 564.5 | 564.0 | 564.2 | 564.5 | 564.8 | 565.0 | 565.2 | 565.5 | 566.0 | 567.0 | 57.5° | 125.6 | 120.7 |
| 567.2 | 567.0 | 567.5 | 568.0 | 568.5 | 569.0 | 568.8 | 568.5 | 568.0 | 569.0 | 60° | 122.7 | 117.7 |
| 569.5 | 570.0 | 570.8 | 571.5 | 572.2 | 573.0 | 572.8 | 572.5 | 572.0 | 572.0 | 62.5° | 120.7 | 114.8 |
| 574.0 | 574.0 | 574.8 | 575.5 | 576.2 | 577.0 | 577.0 | 577.0 | 577.0 | 578.0 | 65° | 117.7 | 111.8 |
| 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 576.0 | 67.5° | 113.8 | 105.8 |
| | | | | | | | | | | 70° | 105.8 | 98.9 |
| | | | | | | | | | | 72.5° | 97.9 | 90.0 |
| | | | | | | | | | | 75° | 86.1 | 79.1 |
| | | | | | | | | | | 77.5° | 72.2 | 64.3 |
| | | | | | | | | | | 80° | 54.4 | 49.5 |
| | | | | | | | | | | 82.5° | 39.6 | 33.6 |
| | | | | | | | | | | 85° | 17.8 | 12.9 |
| | | | | | | | | | | 87.5° | 0.0 | 0.0 |
| | | | | | | | | | | 90° | 0.0 | 0.0 |
| | | | | | | | | | | 92.5° | 0.0 | 0.0 |
| | | | | | | | | | | 95° | 1.0 | 1.0 |
| | | | | | | | | | | 97.5° | 3.0 | 2.0 |
| | | | | | | | | | | 100° | 14.0 | 10.0 |
| | | | | | | | | | | 102.5° | 38.0 | 32.0 |
| | | | | | | | | | | 105° | 61.0 | 56.0 |
| | | | | | | | | | | 107.5° | 84.0 | 80.0 |
| | | | | | | | | | | 110° | 106.0 | 103.0 |



REPORT NUMBER: P227542

CATALOG NUMBER: ISS-AF-450-LED-E1-1

0-LED-E1-T2-7060-ULG

tinued):

| 175° | 180° |
|-------|-------|
| 391.7 | 391.7 |
| 349.2 | 348.2 |
| 295.8 | 293.8 |
| 272.0 | 271.1 |
| 272.0 | 272.0 |
| 283.9 | 283.9 |
| 297.8 | 297.8 |
| 307.7 | 308.6 |
| 310.6 | 311.6 |
| 295.8 | 295.8 |
| 267.1 | 267.1 |
| 229.5 | 233.5 |
| 195.9 | 199.8 |
| 174.1 | 177.1 |
| 167.2 | 168.2 |
| 184.0 | 185.0 |
| 181.0 | 183.0 |
| 155.3 | 156.3 |
| 139.5 | 139.5 |
| 133.5 | 132.6 |
| 133.5 | 131.6 |
| 137.5 | 136.5 |
| 131.6 | 131.6 |
| 128.6 | 128.6 |
| 125.6 | 125.6 |
| 124.6 | 123.7 |
| 124.6 | 122.7 |
| 122.7 | 119.7 |
| 115.7 | 107.8 |
| 98.9 | 92.0 |
| 80.1 | 79.1 |
| 62.3 | 63.3 |
| 47.5 | 47.5 |
| 34.6 | 28.7 |
| 9.9 | 9.9 |
| 0.0 | 0.0 |
| 0.0 | 0.0 |
| 0.0 | 0.0 |
| 1.0 | 1.0 |
| 2.0 | 2.0 |
| 8.0 | 8.0 |
| 28.0 | 28.0 |
| 54.0 | 54.0 |
| 77.0 | 78.0 |
| 102.0 | 101.0 |

CANDELA DISTRIBUTION (continued):

| | 155° | 165° | 175° |
|--------|-------|-------|-------|
| 112.5° | 129.0 | 126.0 | 124.0 |
| 115° | 151.0 | 149.0 | 147.0 |
| 117.5° | 174.0 | 172.0 | 170.0 |
| 120° | 198.0 | 196.0 | 195.0 |
| 122.5° | 223.0 | 221.0 | 220.0 |
| 125° | 248.0 | 247.0 | 246.0 |
| 127.5° | 272.0 | 270.0 | 269.0 |
| 130° | 294.0 | 293.0 | 292.0 |
| 132.5° | 318.0 | 317.0 | 314.0 |
| 135° | 341.0 | 339.0 | 337.0 |
| 137.5° | 364.0 | 363.0 | 360.0 |
| 140° | 386.0 | 385.0 | 383.0 |
| 142.5° | 407.0 | 408.0 | 406.0 |
| 145° | 428.0 | 428.0 | 426.0 |
| 147.5° | 448.0 | 447.0 | 444.0 |
| 150° | 465.0 | 464.0 | 462.0 |
| 152.5° | 482.0 | 483.0 | 480.0 |
| 155° | 501.0 | 502.0 | 500.0 |
| 157.5° | 516.0 | 517.0 | 515.0 |
| 160° | 529.0 | 529.0 | 527.0 |
| 162.5° | 538.0 | 539.0 | 536.0 |
| 165° | 548.0 | 549.0 | 547.0 |
| 167.5° | 558.0 | 559.0 | 556.0 |
| 170° | 565.0 | 566.0 | 563.0 |
| 172.5° | 567.0 | 569.0 | 566.0 |
| 175° | 569.0 | 570.0 | 569.0 |
| 177.5° | 574.0 | 575.0 | 573.0 |
| 180° | 576.0 | 576.0 | 576.0 |



12-7060-ULG

| |
|-------|
| 180° |
| 124.0 |
| 146.0 |
| 169.0 |
| 193.0 |
| 219.0 |
| 244.0 |
| 267.0 |
| 290.0 |
| 313.0 |
| 336.0 |
| 359.0 |
| 382.0 |
| 404.0 |
| 425.0 |
| 444.0 |
| 461.0 |
| 479.0 |
| 499.0 |
| 513.0 |
| 525.0 |
| 535.0 |
| 546.0 |
| 555.0 |
| 562.0 |
| 565.0 |
| 567.0 |
| 572.0 |
| 576.0 |

(END OF REPORT)