

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: PORTFOLIO

Report Number: P249301

Luminaire Tested: **LSR8B90D010 EC8B90827 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249301
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B90D010 EC8B90827 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8767.0 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

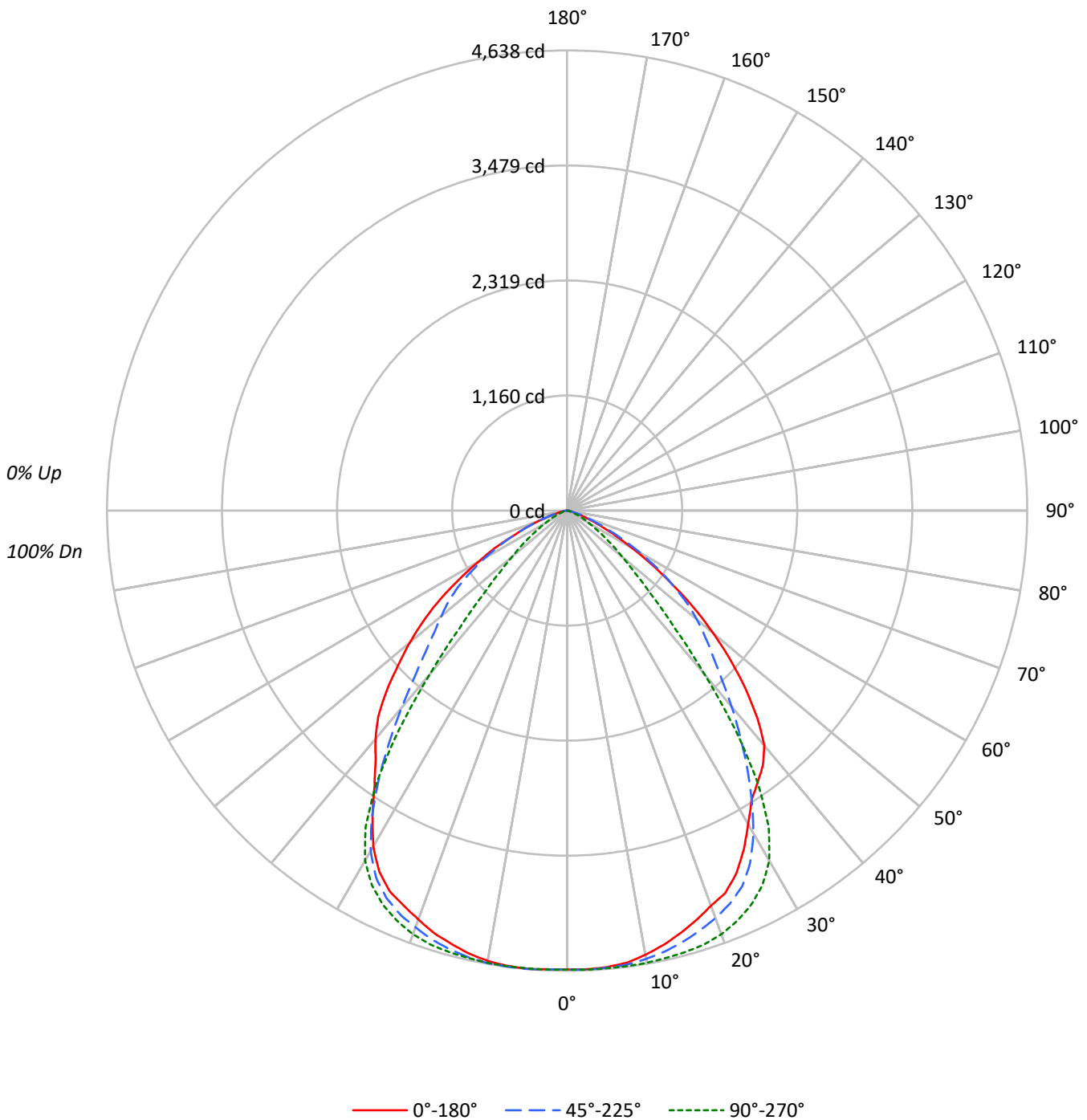
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249301

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Luminous Intensity Polar Plot





TEST NUMBER: P249301

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | |
| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 102 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 91 | 90 |
| 2 | 104 | 97 | 92 | 88 | 101 | 96 | 91 | 87 | 92 | 88 | 85 | 89 | 86 | 83 | 86 | 83 | 81 | 79 |
| 3 | 96 | 88 | 81 | 76 | 94 | 86 | 80 | 75 | 84 | 78 | 74 | 81 | 77 | 73 | 79 | 75 | 72 | 70 |
| 4 | 89 | 80 | 72 | 67 | 87 | 78 | 72 | 66 | 76 | 70 | 66 | 74 | 69 | 65 | 72 | 67 | 64 | 62 |
| 5 | 83 | 72 | 65 | 59 | 81 | 71 | 64 | 59 | 69 | 63 | 58 | 68 | 62 | 58 | 66 | 61 | 57 | 55 |
| 6 | 78 | 66 | 58 | 53 | 76 | 65 | 58 | 53 | 64 | 57 | 52 | 62 | 56 | 52 | 61 | 55 | 51 | 50 |
| 7 | 72 | 61 | 53 | 48 | 71 | 60 | 53 | 48 | 59 | 52 | 47 | 57 | 51 | 47 | 56 | 51 | 47 | 45 |
| 8 | 68 | 56 | 48 | 43 | 66 | 55 | 48 | 43 | 54 | 48 | 43 | 53 | 47 | 43 | 52 | 46 | 42 | 41 |
| 9 | 64 | 52 | 44 | 39 | 62 | 51 | 44 | 39 | 50 | 44 | 39 | 49 | 43 | 39 | 48 | 43 | 39 | 37 |
| 10 | 60 | 48 | 41 | 36 | 59 | 48 | 41 | 36 | 47 | 40 | 36 | 46 | 40 | 36 | 45 | 40 | 36 | 34 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|--------|--------|--------|
| 0° | 142636 | 142636 | 142636 |
| 5° | 142952 | 143336 | 143491 |
| 10° | 142351 | 144915 | 144295 |
| 15° | 140773 | 147036 | 144262 |
| 20° | 139081 | 149103 | 143889 |
| 25° | 137277 | 149274 | 144038 |
| 30° | 129872 | 145076 | 139155 |
| 35° | 125995 | 126085 | 127395 |
| 40° | 124433 | 86751 | 120935 |
| 45° | 110876 | 52082 | 112389 |
| 50° | 92194 | 34660 | 99342 |
| 55° | 69143 | 23897 | 84228 |
| 60° | 46859 | 15924 | 63547 |
| 65° | 28267 | 10332 | 43662 |
| 70° | 15670 | 5599 | 26858 |
| 75° | 7101 | 2371 | 13904 |
| 80° | 6180 | 2646 | 9696 |
| 85° | 7041 | 3503 | 9659 |



TEST NUMBER: P249301

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 441.5 | 5.0 |
| 10°-20° | 1282.0 | 14.6 |
| 20°-30° | 1945.9 | 22.2 |
| 30°-40° | 2043.8 | 23.3 |
| 40°-50° | 1532.3 | 17.5 |
| 50°-60° | 983.1 | 11.2 |
| 60°-70° | 420.6 | 4.8 |
| 70°-80° | 99.4 | 1.1 |
| 80°-90° | 18.5 | 0.2 |
| 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° | 3669.4 | 41.9 |
| 0°-40° | 5713.2 | 65.2 |
| 0°-60° | 8228.6 | 93.9 |
| 0°-90° | 8767.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 8767.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 4626 | 4626 | 4626 | 4626 | 4626 | |
| 5° | 4618 | 4626 | 4631 | 4638 | 4636 | 439 |
| 15° | 4410 | 4502 | 4606 | 4576 | 4519 | 1244 |
| 25° | 4035 | 4176 | 4387 | 4308 | 4233 | 1843 |
| 35° | 3347 | 3161 | 3349 | 3310 | 3384 | 2101 |
| 45° | 2542 | 2078 | 1194 | 2019 | 2577 | 1947 |
| 55° | 1286 | 1286 | 444 | 1341 | 1567 | 1167 |
| 65° | 387 | 457 | 142 | 588 | 598 | 413 |
| 75° | 60 | 70 | 20 | 119 | 117 | 87 |
| 85° | 20 | 12 | 10 | 20 | 27 | 21 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P249301

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 |
| 2.5° | 4628.1 | 4633.1 | 4630.6 | 4630.6 | 4628.1 | 4630.6 | 4630.6 | 4635.6 | 4635.6 | 4630.6 | 4628.1 |
| 5° | 4618.2 | 4623.2 | 4623.2 | 4618.2 | 4618.2 | 4630.6 | 4623.2 | 4628.1 | 4628.1 | 4625.6 | 4625.6 |
| 7.5° | 4595.9 | 4595.9 | 4605.8 | 4598.4 | 4598.4 | 4605.8 | 4603.3 | 4608.3 | 4613.2 | 4615.7 | 4615.7 |
| 10° | 4546.2 | 4551.2 | 4553.6 | 4553.6 | 4556.1 | 4563.6 | 4568.5 | 4578.5 | 4583.4 | 4588.4 | 4590.9 |
| 12.5° | 4484.1 | 4491.6 | 4494.1 | 4491.6 | 4499.0 | 4508.9 | 4521.4 | 4533.8 | 4541.3 | 4551.2 | 4558.6 |
| 15° | 4409.6 | 4409.6 | 4414.6 | 4422.1 | 4427.0 | 4441.9 | 4454.3 | 4469.2 | 4489.1 | 4501.5 | 4513.9 |
| 17.5° | 4327.7 | 4332.7 | 4340.1 | 4340.1 | 4350.1 | 4374.9 | 4382.3 | 4404.7 | 4427.0 | 4439.4 | 4464.3 |
| 20° | 4238.3 | 4243.3 | 4250.7 | 4255.7 | 4268.1 | 4288.0 | 4302.9 | 4322.7 | 4347.6 | 4369.9 | 4394.7 |
| 22.5° | 4168.8 | 4158.9 | 4163.8 | 4168.8 | 4181.2 | 4198.6 | 4216.0 | 4240.8 | 4265.6 | 4288.0 | 4312.8 |
| 25° | 4034.7 | 4037.2 | 4044.7 | 4049.6 | 4064.5 | 4079.4 | 4099.3 | 4129.1 | 4151.4 | 4176.3 | 4203.5 |
| 27.5° | 3853.5 | 3856.0 | 3868.4 | 3868.4 | 3880.8 | 3905.6 | 3918.0 | 3942.8 | 3972.7 | 3997.5 | 4029.8 |
| 30° | 3647.4 | 3652.3 | 3652.3 | 3662.3 | 3669.7 | 3682.2 | 3694.5 | 3719.4 | 3734.3 | 3756.6 | 3801.3 |
| 32.5° | 3458.7 | 3463.6 | 3461.1 | 3458.7 | 3451.2 | 3448.7 | 3446.3 | 3451.2 | 3456.2 | 3463.6 | 3481.0 |
| 35° | 3347.0 | 3334.5 | 3324.6 | 3307.2 | 3287.4 | 3262.5 | 3240.2 | 3210.4 | 3183.1 | 3160.7 | 3135.9 |
| 37.5° | 3240.2 | 3237.7 | 3222.8 | 3198.0 | 3158.2 | 3113.6 | 3061.4 | 2996.9 | 2932.3 | 2862.8 | 2795.8 |
| 40° | 3091.2 | 3083.7 | 3071.3 | 3036.6 | 2991.9 | 2937.3 | 2867.8 | 2788.3 | 2684.0 | 2577.2 | 2468.0 |
| 42.5° | 2837.9 | 2840.4 | 2825.5 | 2798.2 | 2756.0 | 2703.9 | 2631.9 | 2545.0 | 2433.3 | 2306.6 | 2165.1 |
| 45° | 2542.5 | 2542.5 | 2537.5 | 2515.2 | 2485.4 | 2443.2 | 2388.5 | 2316.6 | 2207.3 | 2078.2 | 1926.7 |
| 47.5° | 2234.6 | 2237.1 | 2229.6 | 2224.7 | 2212.2 | 2185.0 | 2145.2 | 2090.6 | 2013.6 | 1889.5 | 1738.0 |
| 50° | 1921.8 | 1921.8 | 1934.2 | 1931.7 | 1931.7 | 1921.8 | 1904.4 | 1872.1 | 1805.1 | 1705.8 | 1564.3 |
| 52.5° | 1608.9 | 1613.9 | 1621.4 | 1631.3 | 1643.7 | 1663.5 | 1643.7 | 1628.8 | 1586.6 | 1509.6 | 1388.0 |
| 55° | 1286.1 | 1291.1 | 1303.5 | 1320.9 | 1335.8 | 1355.7 | 1360.6 | 1360.6 | 1338.3 | 1286.1 | 1194.3 |
| 57.5° | 1010.6 | 1003.1 | 1013.0 | 1027.9 | 1047.8 | 1067.7 | 1082.6 | 1099.9 | 1097.4 | 1062.7 | 988.2 |
| 60° | 759.8 | 762.3 | 769.7 | 784.6 | 799.5 | 816.9 | 836.7 | 851.6 | 859.1 | 841.7 | 794.5 |
| 62.5° | 553.7 | 553.7 | 563.6 | 578.5 | 586.0 | 610.8 | 623.2 | 630.7 | 638.1 | 635.6 | 605.8 |
| 65° | 387.4 | 392.3 | 397.3 | 404.7 | 412.1 | 427.0 | 434.5 | 449.4 | 454.4 | 456.9 | 434.5 |
| 67.5° | 273.1 | 265.7 | 270.7 | 275.6 | 283.0 | 293.0 | 307.9 | 307.9 | 315.3 | 315.3 | 300.4 |
| 70° | 173.8 | 173.8 | 176.3 | 183.7 | 188.7 | 191.2 | 196.2 | 201.1 | 208.6 | 206.1 | 206.1 |
| 72.5° | 116.7 | 114.2 | 116.7 | 119.2 | 121.7 | 129.1 | 129.1 | 131.6 | 136.6 | 139.1 | 129.1 |
| 75° | 59.6 | 62.1 | 67.0 | 64.6 | 72.0 | 67.0 | 69.5 | 77.0 | 74.5 | 69.5 | 69.5 |
| 77.5° | 49.6 | 49.6 | 49.6 | 47.2 | 52.1 | 52.1 | 49.6 | 54.6 | 52.1 | 52.1 | 49.6 |
| 80° | 34.8 | 37.2 | 34.8 | 32.3 | 34.8 | 32.3 | 32.3 | 32.3 | 32.3 | 32.3 | 29.8 |
| 82.5° | 27.3 | 22.4 | 24.8 | 22.4 | 24.8 | 24.8 | 22.4 | 19.9 | 19.9 | 22.4 | 19.9 |
| 85° | 19.9 | 14.9 | 17.4 | 17.4 | 14.9 | 14.9 | 14.9 | 14.9 | 14.9 | 12.4 | 12.4 |
| 87.5° | 12.4 | 7.5 | 7.5 | 7.5 | 9.9 | 9.9 | 9.9 | 7.5 | 9.9 | 9.9 | 5.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P249301

CATALOG NUMBER: LSR8B90D010 EC8B90827 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° | 105° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 |
| 2.5° | 4633.1 | 4630.6 | 4635.6 | 4633.1 | 4633.1 | 4630.6 | 4633.1 | 4630.6 | 4635.6 | 4625.6 | 4628.1 |
| 5° | 4633.1 | 4628.1 | 4630.6 | 4633.1 | 4635.6 | 4630.6 | 4630.6 | 4630.6 | 4635.6 | 4630.6 | 4633.1 |
| 7.5° | 4623.2 | 4620.7 | 4628.1 | 4633.1 | 4630.6 | 4628.1 | 4633.1 | 4630.6 | 4635.6 | 4633.1 | 4638.0 |
| 10° | 4603.3 | 4605.8 | 4610.8 | 4618.2 | 4620.7 | 4623.2 | 4628.1 | 4628.1 | 4635.6 | 4625.6 | 4630.6 |
| 12.5° | 4573.5 | 4583.4 | 4595.9 | 4600.8 | 4610.8 | 4610.8 | 4615.7 | 4618.2 | 4623.2 | 4620.7 | 4628.1 |
| 15° | 4536.3 | 4548.7 | 4563.6 | 4576.0 | 4588.4 | 4595.9 | 4603.3 | 4605.8 | 4613.2 | 4605.8 | 4608.3 |
| 17.5° | 4491.6 | 4506.4 | 4528.8 | 4543.7 | 4563.6 | 4571.0 | 4580.9 | 4585.9 | 4593.4 | 4588.4 | 4590.9 |
| 20° | 4429.5 | 4446.9 | 4471.7 | 4494.1 | 4506.4 | 4523.8 | 4536.3 | 4543.7 | 4548.7 | 4543.7 | 4546.2 |
| 22.5° | 4342.6 | 4367.4 | 4399.7 | 4417.1 | 4441.9 | 4456.8 | 4459.3 | 4476.7 | 4489.1 | 4476.7 | 4481.7 |
| 25° | 4240.8 | 4265.6 | 4290.5 | 4327.7 | 4350.1 | 4367.4 | 4384.8 | 4387.3 | 4399.7 | 4397.2 | 4394.7 |
| 27.5° | 4071.9 | 4104.3 | 4146.4 | 4176.3 | 4206.0 | 4233.4 | 4253.2 | 4258.2 | 4270.6 | 4265.6 | 4268.1 |
| 30° | 3841.0 | 3875.8 | 3915.6 | 3962.7 | 4004.9 | 4032.2 | 4057.1 | 4074.4 | 4086.8 | 4079.4 | 4076.9 |
| 32.5° | 3513.3 | 3548.1 | 3590.3 | 3637.4 | 3687.1 | 3726.8 | 3756.6 | 3779.0 | 3793.9 | 3788.9 | 3776.5 |
| 35° | 3138.4 | 3148.3 | 3175.7 | 3212.9 | 3255.1 | 3297.3 | 3324.6 | 3349.4 | 3366.8 | 3371.8 | 3371.8 |
| 37.5° | 2753.5 | 2721.3 | 2701.4 | 2701.4 | 2726.2 | 2743.6 | 2768.4 | 2783.3 | 2810.7 | 2820.6 | 2828.0 |
| 40° | 2381.1 | 2306.6 | 2237.1 | 2185.0 | 2150.2 | 2147.7 | 2147.7 | 2155.1 | 2180.0 | 2212.2 | 2242.1 |
| 42.5° | 2048.4 | 1929.2 | 1822.5 | 1725.6 | 1656.1 | 1616.4 | 1599.0 | 1601.5 | 1621.4 | 1651.1 | 1700.8 |
| 45° | 1782.7 | 1633.8 | 1499.7 | 1383.0 | 1288.6 | 1226.5 | 1196.8 | 1194.3 | 1209.2 | 1243.9 | 1298.6 |
| 47.5° | 1576.7 | 1417.7 | 1266.3 | 1132.2 | 1030.4 | 963.4 | 928.6 | 918.7 | 928.6 | 960.9 | 1025.4 |
| 50° | 1405.3 | 1241.5 | 1085.0 | 946.0 | 836.7 | 767.2 | 734.9 | 722.5 | 734.9 | 762.3 | 826.8 |
| 52.5° | 1246.4 | 1077.6 | 931.1 | 797.0 | 680.3 | 620.7 | 586.0 | 578.5 | 586.0 | 618.2 | 670.4 |
| 55° | 1062.7 | 918.7 | 774.7 | 640.6 | 538.8 | 479.2 | 451.9 | 444.5 | 451.9 | 481.7 | 536.3 |
| 57.5° | 881.5 | 757.3 | 630.7 | 509.0 | 422.1 | 369.9 | 345.1 | 335.2 | 352.5 | 372.4 | 437.0 |
| 60° | 712.6 | 613.3 | 506.5 | 399.8 | 327.8 | 280.6 | 260.7 | 258.2 | 263.2 | 288.0 | 332.7 |
| 62.5° | 558.7 | 476.7 | 392.3 | 305.4 | 245.8 | 225.9 | 201.1 | 198.7 | 203.6 | 218.5 | 253.3 |
| 65° | 402.2 | 350.1 | 285.5 | 223.4 | 176.3 | 149.0 | 139.1 | 141.6 | 146.5 | 156.4 | 188.7 |
| 67.5° | 280.6 | 243.3 | 198.7 | 156.4 | 121.7 | 109.2 | 99.3 | 96.8 | 99.3 | 116.7 | 134.1 |
| 70° | 188.7 | 166.3 | 134.1 | 119.2 | 84.4 | 67.0 | 69.5 | 62.1 | 72.0 | 72.0 | 86.9 |
| 72.5° | 124.1 | 109.2 | 89.4 | 69.5 | 59.6 | 47.2 | 47.2 | 44.7 | 49.6 | 52.1 | 64.6 |
| 75° | 64.6 | 49.6 | 49.6 | 34.8 | 24.8 | 12.4 | 22.4 | 19.9 | 17.4 | 19.9 | 24.8 |
| 77.5° | 44.7 | 37.2 | 34.8 | 27.3 | 24.8 | 19.9 | 19.9 | 19.9 | 19.9 | 22.4 | 24.8 |
| 80° | 27.3 | 27.3 | 19.9 | 17.4 | 14.9 | 12.4 | 14.9 | 14.9 | 14.9 | 14.9 | 17.4 |
| 82.5° | 17.4 | 14.9 | 14.9 | 12.4 | 12.4 | 9.9 | 9.9 | 9.9 | 9.9 | 9.9 | 14.9 |
| 85° | 14.9 | 9.9 | 9.9 | 7.5 | 9.9 | 17.4 | 7.5 | 9.9 | 9.9 | 9.9 | 7.5 |
| 87.5° | 5.0 | 7.5 | 7.5 | 7.5 | 5.0 | 2.5 | 5.0 | 7.5 | 7.5 | 12.4 | 9.9 |
| 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: P249301

CATALOG NUMBER: LSR8B90D010 EC8B90827 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

| | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 | 4625.6 |
| 2.5° | 4633.1 | 4635.6 | 4635.6 | 4633.1 | 4633.1 | 4628.1 | 4638.0 | 4630.6 | 4633.1 | 4643.0 | 4635.6 |
| 5° | 4638.0 | 4640.5 | 4640.5 | 4638.0 | 4638.0 | 4638.0 | 4640.5 | 4640.5 | 4638.0 | 4635.6 | 4640.5 |
| 7.5° | 4648.0 | 4645.5 | 4645.5 | 4640.5 | 4640.5 | 4635.6 | 4640.5 | 4633.1 | 4638.0 | 4633.1 | 4640.5 |
| 10° | 4635.6 | 4638.0 | 4635.6 | 4633.1 | 4633.1 | 4630.6 | 4630.6 | 4623.2 | 4625.6 | 4618.2 | 4623.2 |
| 12.5° | 4628.1 | 4625.6 | 4625.6 | 4620.7 | 4615.7 | 4610.8 | 4608.3 | 4600.8 | 4600.8 | 4583.4 | 4590.9 |
| 15° | 4608.3 | 4610.8 | 4603.3 | 4593.4 | 4588.4 | 4576.0 | 4571.0 | 4561.1 | 4551.2 | 4538.8 | 4541.3 |
| 17.5° | 4590.9 | 4583.4 | 4573.5 | 4563.6 | 4543.7 | 4533.8 | 4523.8 | 4508.9 | 4504.0 | 4489.1 | 4484.1 |
| 20° | 4538.8 | 4533.8 | 4521.4 | 4504.0 | 4491.6 | 4469.2 | 4459.3 | 4444.4 | 4432.0 | 4417.1 | 4409.6 |
| 22.5° | 4471.7 | 4466.7 | 4451.8 | 4434.5 | 4414.6 | 4404.7 | 4394.7 | 4367.4 | 4355.0 | 4340.1 | 4337.6 |
| 25° | 4387.3 | 4379.8 | 4365.0 | 4345.1 | 4335.1 | 4307.8 | 4297.9 | 4278.0 | 4273.1 | 4258.2 | 4255.7 |
| 27.5° | 4258.2 | 4248.2 | 4230.9 | 4206.0 | 4188.6 | 4171.3 | 4161.4 | 4146.4 | 4141.5 | 4126.6 | 4124.1 |
| 30° | 4064.5 | 4052.1 | 4017.3 | 4007.4 | 3977.6 | 3960.2 | 3960.2 | 3940.4 | 3942.8 | 3932.9 | 3932.9 |
| 32.5° | 3759.1 | 3739.3 | 3711.9 | 3692.1 | 3672.2 | 3662.3 | 3662.3 | 3654.8 | 3659.8 | 3659.8 | 3664.8 |
| 35° | 3354.4 | 3327.1 | 3312.2 | 3299.8 | 3299.8 | 3309.7 | 3339.5 | 3347.0 | 3361.9 | 3374.3 | 3384.2 |
| 37.5° | 2835.4 | 2833.0 | 2850.4 | 2865.3 | 2902.5 | 2944.7 | 2996.9 | 3041.6 | 3083.7 | 3113.6 | 3143.3 |
| 40° | 2274.3 | 2336.4 | 2386.1 | 2455.6 | 2512.7 | 2594.6 | 2689.0 | 2765.9 | 2837.9 | 2890.1 | 2944.7 |
| 42.5° | 1775.3 | 1854.7 | 1959.0 | 2060.8 | 2162.6 | 2274.3 | 2398.5 | 2505.3 | 2599.6 | 2671.6 | 2728.7 |
| 45° | 1383.0 | 1492.2 | 1618.9 | 1748.0 | 1879.6 | 2018.6 | 2147.7 | 2257.0 | 2356.3 | 2430.8 | 2487.9 |
| 47.5° | 1114.8 | 1234.0 | 1378.0 | 1519.5 | 1668.5 | 1815.0 | 1959.0 | 2053.4 | 2135.3 | 2194.9 | 2247.1 |
| 50° | 921.1 | 1047.8 | 1199.3 | 1360.6 | 1509.6 | 1656.1 | 1780.2 | 1872.1 | 1939.2 | 1991.3 | 2023.5 |
| 52.5° | 769.7 | 903.8 | 1065.2 | 1226.5 | 1375.5 | 1509.6 | 1621.4 | 1690.9 | 1745.5 | 1782.7 | 1812.5 |
| 55° | 635.6 | 764.8 | 916.2 | 1067.7 | 1214.1 | 1340.7 | 1432.6 | 1484.8 | 1527.0 | 1549.3 | 1566.7 |
| 57.5° | 518.9 | 638.1 | 777.1 | 916.2 | 1042.8 | 1147.1 | 1219.1 | 1271.2 | 1291.1 | 1308.5 | 1306.0 |
| 60° | 407.2 | 518.9 | 645.6 | 764.8 | 874.0 | 958.4 | 1010.6 | 1040.3 | 1055.2 | 1062.7 | 1057.7 |
| 62.5° | 320.3 | 422.1 | 518.9 | 623.2 | 702.7 | 774.7 | 824.4 | 824.4 | 831.8 | 834.3 | 841.7 |
| 65° | 238.3 | 315.3 | 399.8 | 476.7 | 541.2 | 588.4 | 615.8 | 623.2 | 633.2 | 630.7 | 625.7 |
| 67.5° | 176.3 | 233.4 | 295.4 | 352.5 | 397.3 | 427.0 | 446.9 | 464.3 | 461.8 | 456.9 | 454.4 |
| 70° | 121.7 | 158.9 | 213.5 | 248.3 | 280.6 | 310.4 | 315.3 | 317.8 | 320.3 | 322.8 | 317.8 |
| 72.5° | 84.4 | 111.7 | 141.6 | 171.3 | 191.2 | 203.6 | 216.0 | 218.5 | 218.5 | 218.5 | 216.0 |
| 75° | 42.2 | 57.1 | 84.4 | 96.8 | 114.2 | 119.2 | 129.1 | 129.1 | 136.6 | 126.6 | 124.1 |
| 77.5° | 37.2 | 44.7 | 59.6 | 69.5 | 77.0 | 84.4 | 86.9 | 94.3 | 91.9 | 86.9 | 89.4 |
| 80° | 22.4 | 27.3 | 37.2 | 42.2 | 52.1 | 54.6 | 57.1 | 59.6 | 57.1 | 59.6 | 59.6 |
| 82.5° | 17.4 | 19.9 | 24.8 | 24.8 | 32.3 | 32.3 | 34.8 | 34.8 | 37.2 | 37.2 | 37.2 |
| 85° | 9.9 | 17.4 | 14.9 | 29.8 | 19.9 | 19.9 | 24.8 | 29.8 | 24.8 | 24.8 | 29.8 |
| 87.5° | 9.9 | 9.9 | 7.5 | 9.9 | 9.9 | 9.9 | 12.4 | 14.9 | 14.9 | 17.4 | 14.9 |
| 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: P249301

CATALOG NUMBER: LSR8B90D010 EC8B90827 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

| | 165° | 170° | 175° | 180° |
|-------|--------|--------|--------|--------|
| 0° | 4625.6 | 4625.6 | 4625.6 | 4625.6 |
| 2.5° | 4633.1 | 4638.0 | 4630.6 | 4628.1 |
| 5° | 4640.5 | 4640.5 | 4635.6 | 4635.6 |
| 7.5° | 4640.5 | 4640.5 | 4633.1 | 4628.1 |
| 10° | 4620.7 | 4620.7 | 4613.2 | 4608.3 |
| 12.5° | 4583.4 | 4583.4 | 4580.9 | 4573.5 |
| 15° | 4536.3 | 4536.3 | 4526.3 | 4518.9 |
| 17.5° | 4471.7 | 4476.7 | 4464.3 | 4464.3 |
| 20° | 4402.2 | 4399.7 | 4389.8 | 4384.8 |
| 22.5° | 4330.2 | 4325.2 | 4322.7 | 4307.8 |
| 25° | 4253.2 | 4248.2 | 4240.8 | 4233.4 |
| 27.5° | 4121.6 | 4119.1 | 4111.7 | 4101.8 |
| 30° | 3920.5 | 3918.0 | 3908.1 | 3908.1 |
| 32.5° | 3659.8 | 3657.3 | 3647.4 | 3649.9 |
| 35° | 3389.1 | 3399.1 | 3394.1 | 3384.2 |
| 37.5° | 3163.2 | 3170.7 | 3175.7 | 3170.7 |
| 40° | 2974.5 | 2996.9 | 2999.4 | 3004.3 |
| 42.5° | 2773.4 | 2803.2 | 2813.1 | 2818.1 |
| 45° | 2532.5 | 2559.9 | 2582.2 | 2577.2 |
| 47.5° | 2286.7 | 2306.6 | 2326.5 | 2311.6 |
| 50° | 2050.9 | 2063.3 | 2070.8 | 2070.8 |
| 52.5° | 1827.4 | 1827.4 | 1824.9 | 1827.4 |
| 55° | 1571.7 | 1571.7 | 1561.8 | 1566.7 |
| 57.5° | 1303.5 | 1308.5 | 1301.0 | 1288.6 |
| 60° | 1055.2 | 1042.8 | 1037.8 | 1030.4 |
| 62.5° | 821.9 | 821.9 | 804.5 | 826.8 |
| 65° | 615.8 | 608.3 | 600.8 | 598.4 |
| 67.5° | 446.9 | 444.5 | 437.0 | 434.5 |
| 70° | 315.3 | 305.4 | 302.9 | 297.9 |
| 72.5° | 211.1 | 211.1 | 206.1 | 206.1 |
| 75° | 129.1 | 116.7 | 114.2 | 116.7 |
| 77.5° | 89.4 | 86.9 | 86.9 | 84.4 |
| 80° | 59.6 | 57.1 | 62.1 | 54.6 |
| 82.5° | 37.2 | 39.7 | 37.2 | 39.7 |
| 85° | 24.8 | 29.8 | 27.3 | 27.3 |
| 87.5° | 14.9 | 14.9 | 14.9 | 14.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)