



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6DR-TL-L10-840-DIM-UNV-OM-OF-CS-MWT_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM 12326812.04
 [TESTLAB] UL Verification Services Inc.
 [ISSUEDATE] 01-20-2022
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMCAT] 6DR-TL-L10-840-DIM1-UNV-OM-OF-CS-MWT
 [LUMINAIRE] Black formed aluminum housing, specular reflector, no lens
 [MORE] enclosure
 [LAMP] One white LED
 [_SEARCH_SOURCETYPE] LED
 [_SEARCH_APPLICATION] Indoor, Architectural, Classroom, Commercial, Healthcare, Office, Downlight
 [_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

| | |
|---------------------------------|--------------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 992 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 114 |
| Total Luminaire Watts | 8.7 |
| Ballast Factor | 1.00 |
| CIE Type | Direct |
| Spacing Criterion (0-180) | 0.58 |
| Spacing Criterion (90-270) | 0.58 |
| Spacing Criterion (Diagonal) | 0.68 |
| Basic Luminous Shape | Circular |
| Luminous Length (0-180) | 0.50 ft (Diameter) |
| Luminous Width (90-270) | 0.50 ft (Diameter) |
| Luminous Height | 0.00 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 1790 | 1790 | 1790 |
| 55 | 659 | 659 | 659 |
| 65 | 259 | 259 | 259 |
| 75 | 116 | 116 | 116 |
| 85 | 94 | 94 | 94 |

IES INDOOR REPORT
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CANDELA TABULATION

| | <u>0</u> |
|------|----------|
| 0.0 | 2007.512 |
| 0.5 | 2010.513 |
| 1.0 | 2016.516 |
| 1.5 | 2020.018 |
| 2.0 | 2028.522 |
| 2.5 | 2032.024 |
| 3.0 | 2038.027 |
| 3.5 | 2039.528 |
| 4.0 | 2035.026 |
| 4.5 | 2011.014 |
| 5.0 | 1987.001 |
| 5.5 | 1961.489 |
| 6.0 | 1920.468 |
| 6.5 | 1879.447 |
| 7.0 | 1835.925 |
| 7.5 | 1786.901 |
| 8.0 | 1729.872 |
| 8.5 | 1671.342 |
| 9.0 | 1610.812 |
| 9.5 | 1551.782 |
| 10.0 | 1497.255 |
| 10.5 | 1449.230 |
| 11.0 | 1407.709 |
| 11.5 | 1372.192 |
| 12.0 | 1337.174 |
| 12.5 | 1302.657 |
| 13.0 | 1269.640 |
| 13.5 | 1238.624 |
| 14.0 | 1210.610 |
| 14.5 | 1185.598 |
| 15.0 | 1163.086 |
| 15.5 | 1141.575 |
| 16.0 | 1120.565 |
| 16.5 | 1098.554 |
| 17.0 | 1076.042 |
| 17.5 | 1053.531 |
| 18.0 | 1033.021 |
| 18.5 | 1015.012 |
| 19.0 | 996.502 |
| 19.5 | 977.493 |
| 20.0 | 956.482 |
| 20.5 | 933.971 |
| 21.0 | 910.959 |
| 21.5 | 887.447 |
| 22.0 | 862.435 |
| 22.5 | 838.423 |
| 23.0 | 812.910 |
| 23.5 | 786.897 |
| 24.0 | 759.883 |
| 24.5 | 732.869 |
| 25.0 | 706.356 |
| 25.5 | 679.843 |
| 26.0 | 655.330 |
| 26.5 | 631.818 |

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CANDELA TABULATION - (Cont.)

| | |
|------|---------|
| 27.0 | 609.807 |
| 27.5 | 588.797 |
| 28.0 | 569.787 |
| 28.5 | 552.779 |
| 29.0 | 536.771 |
| 29.5 | 521.263 |
| 30.0 | 501.753 |
| 30.5 | 477.341 |
| 31.0 | 449.326 |
| 31.5 | 418.511 |
| 32.0 | 387.245 |
| 32.5 | 355.779 |
| 33.0 | 324.313 |
| 33.5 | 291.297 |
| 34.0 | 257.780 |
| 34.5 | 227.215 |
| 35.0 | 197.850 |
| 35.5 | 170.136 |
| 36.0 | 143.472 |
| 36.5 | 119.610 |
| 37.0 | 100.050 |
| 37.5 | 86.293 |
| 38.0 | 78.890 |
| 38.5 | 73.887 |
| 39.0 | 68.885 |
| 39.5 | 63.582 |
| 40.0 | 57.929 |
| 40.5 | 51.926 |
| 41.0 | 46.173 |
| 41.5 | 40.821 |
| 42.0 | 36.268 |
| 42.5 | 32.666 |
| 43.0 | 29.865 |
| 43.5 | 27.714 |
| 44.0 | 25.913 |
| 44.5 | 24.462 |
| 45.0 | 23.112 |
| 45.5 | 21.961 |
| 46.0 | 20.861 |
| 46.5 | 19.860 |
| 47.0 | 18.860 |
| 47.5 | 17.909 |
| 48.0 | 16.959 |
| 48.5 | 16.008 |
| 49.0 | 15.058 |
| 49.5 | 14.207 |
| 50.0 | 13.407 |
| 50.5 | 12.606 |
| 51.0 | 11.856 |
| 51.5 | 11.106 |
| 52.0 | 10.355 |
| 52.5 | 9.705 |
| 53.0 | 9.055 |
| 53.5 | 8.454 |
| 54.0 | 7.904 |
| 54.5 | 7.404 |

IES INDOOR REPORT
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CANDELA TABULATION - (Cont.)

| | |
|------|-------|
| 55.0 | 6.903 |
| 55.5 | 6.503 |
| 56.0 | 6.053 |
| 56.5 | 5.703 |
| 57.0 | 5.353 |
| 57.5 | 5.003 |
| 58.0 | 4.702 |
| 58.5 | 4.402 |
| 59.0 | 4.152 |
| 59.5 | 3.902 |
| 60.0 | 3.652 |
| 60.5 | 3.402 |
| 61.0 | 3.202 |
| 61.5 | 3.002 |
| 62.0 | 2.851 |
| 62.5 | 2.701 |
| 63.0 | 2.501 |
| 63.5 | 2.401 |
| 64.0 | 2.251 |
| 64.5 | 2.101 |
| 65.0 | 2.001 |
| 65.5 | 1.851 |
| 66.0 | 1.751 |
| 66.5 | 1.651 |
| 67.0 | 1.551 |
| 67.5 | 1.451 |
| 68.0 | 1.401 |
| 68.5 | 1.301 |
| 69.0 | 1.201 |
| 69.5 | 1.151 |
| 70.0 | 1.101 |
| 70.5 | 1.001 |
| 71.0 | 0.950 |
| 71.5 | 0.900 |
| 72.0 | 0.850 |
| 72.5 | 0.800 |
| 73.0 | 0.750 |
| 73.5 | 0.700 |
| 74.0 | 0.650 |
| 74.5 | 0.600 |
| 75.0 | 0.550 |
| 75.5 | 0.550 |
| 76.0 | 0.500 |
| 76.5 | 0.450 |
| 77.0 | 0.450 |
| 77.5 | 0.400 |
| 78.0 | 0.400 |
| 78.5 | 0.350 |
| 79.0 | 0.350 |
| 79.5 | 0.300 |
| 80.0 | 0.300 |
| 80.5 | 0.250 |
| 81.0 | 0.250 |
| 81.5 | 0.250 |
| 82.0 | 0.200 |
| 82.5 | 0.200 |

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PHOTOMETRIC FILENAME : 6DR-TL-L10-840-DIM-UNV-OM-OF-CS-MWT_.IES

CANDELA TABULATION - (Cont.)

| | |
|-------|-------|
| 83.0 | 0.200 |
| 83.5 | 0.150 |
| 84.0 | 0.150 |
| 84.5 | 0.150 |
| 85.0 | 0.150 |
| 85.5 | 0.100 |
| 86.0 | 0.100 |
| 86.5 | 0.100 |
| 87.0 | 0.100 |
| 87.5 | 0.100 |
| 88.0 | 0.050 |
| 88.5 | 0.050 |
| 89.0 | 0.050 |
| 89.5 | 0.050 |
| 90.0 | 0.050 |
| 90.5 | 0.000 |
| 91.0 | 0.000 |
| 91.5 | 0.000 |
| 92.0 | 0.000 |
| 92.5 | 0.000 |
| 93.0 | 0.000 |
| 93.5 | 0.000 |
| 94.0 | 0.000 |
| 94.5 | 0.000 |
| 95.0 | 0.000 |
| 95.5 | 0.000 |
| 96.0 | 0.000 |
| 96.5 | 0.000 |
| 97.0 | 0.000 |
| 97.5 | 0.000 |
| 98.0 | 0.000 |
| 98.5 | 0.000 |
| 99.0 | 0.000 |
| 99.5 | 0.000 |
| 100.0 | 0.000 |
| 100.5 | 0.000 |
| 101.0 | 0.000 |
| 101.5 | 0.000 |
| 102.0 | 0.000 |
| 102.5 | 0.000 |
| 103.0 | 0.000 |
| 103.5 | 0.000 |
| 104.0 | 0.000 |
| 104.5 | 0.000 |
| 105.0 | 0.000 |
| 105.5 | 0.000 |
| 106.0 | 0.000 |
| 106.5 | 0.000 |
| 107.0 | 0.000 |
| 107.5 | 0.000 |
| 108.0 | 0.000 |
| 108.5 | 0.000 |
| 109.0 | 0.000 |
| 109.5 | 0.000 |
| 110.0 | 0.000 |
| 110.5 | 0.000 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6DR-TL-L10-840-DIM-UNV-OM-OF-CS-MWT_.IES

CANDELA TABULATION - (Cont.)

| | |
|-------|-------|
| 111.0 | 0.000 |
| 111.5 | 0.000 |
| 112.0 | 0.000 |
| 112.5 | 0.000 |
| 113.0 | 0.000 |
| 113.5 | 0.000 |
| 114.0 | 0.000 |
| 114.5 | 0.000 |
| 115.0 | 0.000 |
| 115.5 | 0.000 |
| 116.0 | 0.000 |
| 116.5 | 0.000 |
| 117.0 | 0.000 |
| 117.5 | 0.000 |
| 118.0 | 0.000 |
| 118.5 | 0.000 |
| 119.0 | 0.000 |
| 119.5 | 0.000 |
| 120.0 | 0.000 |
| 120.5 | 0.000 |
| 121.0 | 0.000 |
| 121.5 | 0.000 |
| 122.0 | 0.000 |
| 122.5 | 0.000 |
| 123.0 | 0.000 |
| 123.5 | 0.000 |
| 124.0 | 0.000 |
| 124.5 | 0.000 |
| 125.0 | 0.000 |
| 125.5 | 0.000 |
| 126.0 | 0.000 |
| 126.5 | 0.000 |
| 127.0 | 0.000 |
| 127.5 | 0.000 |
| 128.0 | 0.000 |
| 128.5 | 0.000 |
| 129.0 | 0.000 |
| 129.5 | 0.000 |
| 130.0 | 0.000 |
| 130.5 | 0.000 |
| 131.0 | 0.000 |
| 131.5 | 0.000 |
| 132.0 | 0.000 |
| 132.5 | 0.000 |
| 133.0 | 0.000 |
| 133.5 | 0.000 |
| 134.0 | 0.000 |
| 134.5 | 0.000 |
| 135.0 | 0.000 |
| 135.5 | 0.000 |
| 136.0 | 0.000 |
| 136.5 | 0.000 |
| 137.0 | 0.000 |
| 137.5 | 0.000 |
| 138.0 | 0.000 |
| 138.5 | 0.000 |

CANDELA TABULATION - (Cont.)

| | |
|-------|-------|
| 139.0 | 0.000 |
| 139.5 | 0.000 |
| 140.0 | 0.000 |
| 140.5 | 0.000 |
| 141.0 | 0.000 |
| 141.5 | 0.000 |
| 142.0 | 0.000 |
| 142.5 | 0.000 |
| 143.0 | 0.000 |
| 143.5 | 0.000 |
| 144.0 | 0.000 |
| 144.5 | 0.000 |
| 145.0 | 0.000 |
| 145.5 | 0.000 |
| 146.0 | 0.000 |
| 146.5 | 0.000 |
| 147.0 | 0.000 |
| 147.5 | 0.000 |
| 148.0 | 0.000 |
| 148.5 | 0.000 |
| 149.0 | 0.000 |
| 149.5 | 0.000 |
| 150.0 | 0.000 |
| 150.5 | 0.000 |
| 151.0 | 0.000 |
| 151.5 | 0.000 |
| 152.0 | 0.000 |
| 152.5 | 0.000 |
| 153.0 | 0.000 |
| 153.5 | 0.000 |
| 154.0 | 0.000 |
| 154.5 | 0.000 |
| 155.0 | 0.000 |
| 155.5 | 0.000 |
| 156.0 | 0.000 |
| 156.5 | 0.000 |
| 157.0 | 0.000 |
| 157.5 | 0.000 |
| 158.0 | 0.000 |
| 158.5 | 0.000 |
| 159.0 | 0.000 |
| 159.5 | 0.000 |
| 160.0 | 0.000 |
| 160.5 | 0.000 |
| 161.0 | 0.000 |
| 161.5 | 0.000 |
| 162.0 | 0.000 |
| 162.5 | 0.000 |
| 163.0 | 0.000 |
| 163.5 | 0.000 |
| 164.0 | 0.000 |
| 164.5 | 0.000 |
| 165.0 | 0.000 |
| 165.5 | 0.000 |
| 166.0 | 0.000 |
| 166.5 | 0.000 |

IES INDOOR REPORT
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CANDELA TABULATION - (Cont.)

| | |
|-------|-------|
| 167.0 | 0.000 |
| 167.5 | 0.000 |
| 168.0 | 0.000 |
| 168.5 | 0.000 |
| 169.0 | 0.000 |
| 169.5 | 0.000 |
| 170.0 | 0.000 |
| 170.5 | 0.000 |
| 171.0 | 0.000 |
| 171.5 | 0.000 |
| 172.0 | 0.000 |
| 172.5 | 0.000 |
| 173.0 | 0.000 |
| 173.5 | 0.000 |
| 174.0 | 0.000 |
| 174.5 | 0.000 |
| 175.0 | 0.000 |
| 175.5 | 0.000 |
| 176.0 | 0.000 |
| 176.5 | 0.000 |
| 177.0 | 0.000 |
| 177.5 | 0.000 |
| 178.0 | 0.000 |
| 178.5 | 0.000 |
| 179.0 | 0.000 |
| 179.5 | 0.000 |
| 180.0 | 0.000 |

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ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|--------|-------|--------|
| 0-20 | 500.64 | N.A. | 50.50 |
| 0-30 | 824.93 | N.A. | 83.20 |
| 0-40 | 962.15 | N.A. | 97.00 |
| 0-60 | 989.12 | N.A. | 99.70 |
| 0-80 | 991.83 | N.A. | 100.00 |
| 0-90 | 991.99 | N.A. | 100.00 |
| 10-90 | 819.02 | N.A. | 82.60 |
| 20-40 | 461.52 | N.A. | 46.50 |
| 20-50 | 481.86 | N.A. | 48.60 |
| 40-70 | 29.04 | N.A. | 2.90 |
| 60-80 | 2.71 | N.A. | 0.30 |
| 70-80 | 0.64 | N.A. | 0.10 |
| 80-90 | 0.15 | N.A. | 0.00 |
| 90-110 | 0.00 | N.A. | 0.00 |
| 90-120 | 0.00 | N.A. | 0.00 |
| 90-130 | 0.00 | N.A. | 0.00 |
| 90-150 | 0.00 | N.A. | 0.00 |
| 90-180 | 0.00 | N.A. | 0.00 |
| 110-180 | 0.00 | N.A. | 0.00 |
| 0-180 | 991.99 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 172.97 |
| 10-20 | 327.66 |
| 20-30 | 324.29 |
| 30-40 | 137.23 |
| 40-50 | 20.34 |
| 50-60 | 6.63 |
| 60-70 | 2.07 |
| 70-80 | 0.64 |
| 80-90 | 0.15 |
| 90-100 | 0.00 |
| 100-110 | 0.00 |
| 110-120 | 0.00 |
| 120-130 | 0.00 |
| 130-140 | 0.00 |
| 140-150 | 0.00 |
| 150-160 | 0.00 |
| 160-170 | 0.00 |
| 170-180 | 0.00 |

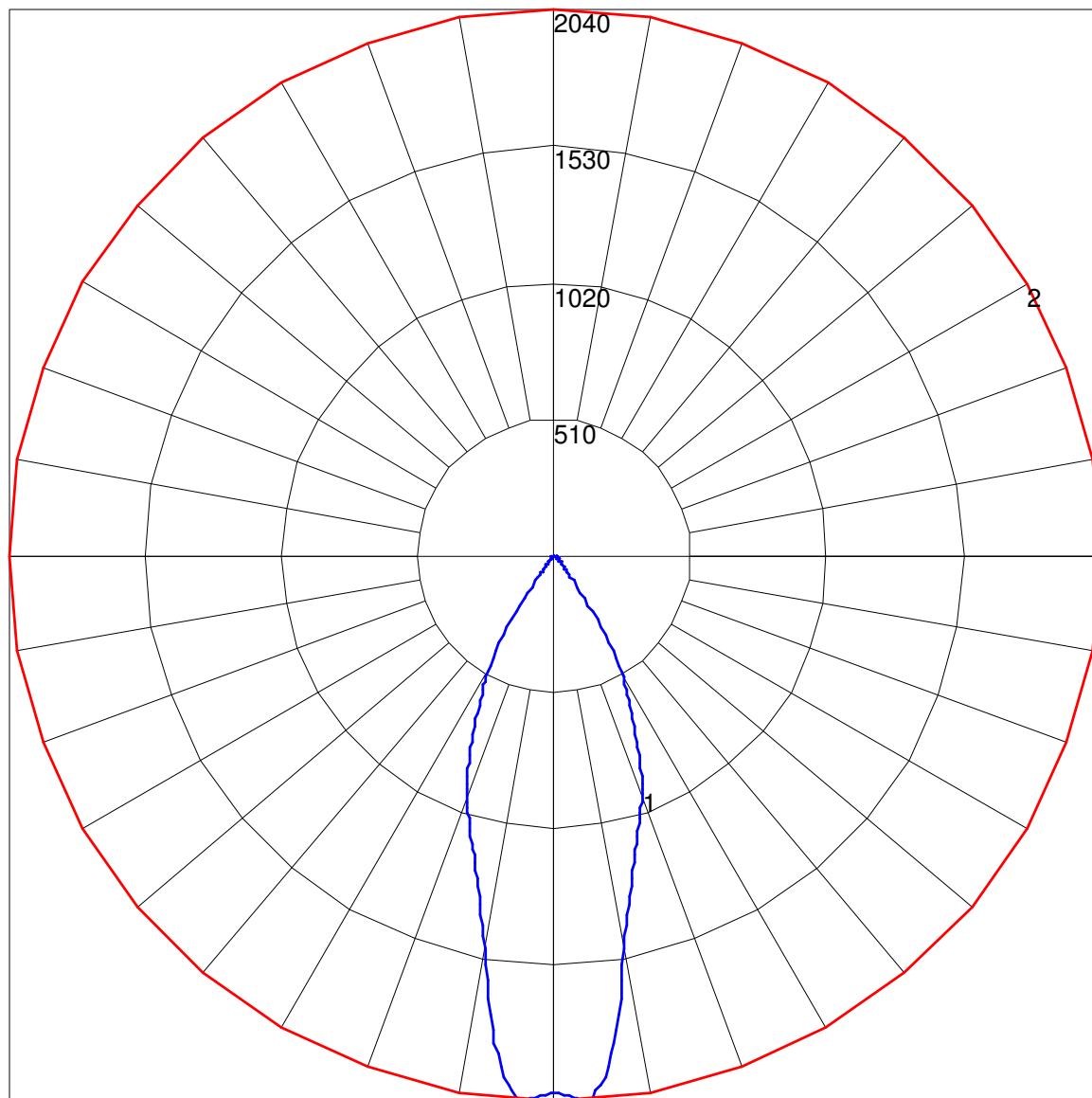
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

| 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 |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 114 | 112 | 109 | 107 | 112 | 109 | 107 | 106 | 105 | 104 | 102 | 102 | 100 | 99 | 98 | 97 | 96 | 95 |
| 2 | 109 | 105 | 101 | 98 | 107 | 103 | 100 | 97 | 100 | 97 | 95 | 97 | 95 | 93 | 94 | 92 | 91 | 89 |
| 3 | 104 | 99 | 94 | 91 | 103 | 97 | 93 | 90 | 95 | 91 | 89 | 92 | 90 | 87 | 90 | 88 | 86 | 84 |
| 4 | 100 | 93 | 88 | 84 | 98 | 92 | 88 | 84 | 90 | 86 | 83 | 88 | 85 | 82 | 86 | 83 | 81 | 80 |
| 5 | 96 | 88 | 83 | 79 | 94 | 87 | 82 | 79 | 86 | 81 | 78 | 84 | 80 | 77 | 82 | 79 | 77 | 75 |
| 6 | 92 | 84 | 78 | 75 | 90 | 83 | 78 | 74 | 81 | 77 | 74 | 80 | 76 | 73 | 79 | 75 | 73 | 72 |
| 7 | 88 | 80 | 74 | 70 | 87 | 79 | 74 | 70 | 78 | 73 | 70 | 77 | 73 | 70 | 75 | 72 | 69 | 68 |
| 8 | 84 | 76 | 70 | 67 | 83 | 75 | 70 | 67 | 74 | 70 | 66 | 73 | 69 | 66 | 72 | 69 | 66 | 65 |
| 9 | 81 | 72 | 67 | 63 | 80 | 72 | 67 | 63 | 71 | 66 | 63 | 70 | 66 | 63 | 69 | 65 | 63 | 62 |
| 10 | 78 | 69 | 64 | 60 | 77 | 69 | 64 | 60 | 68 | 63 | 60 | 67 | 63 | 60 | 66 | 63 | 60 | 59 |

POLAR GRAPH



Maximum Candela = 2039.528 Located At Horizontal Angle = 0, Vertical Angle = 3.5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (3.5) (Through Max. Cd.)