

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: STREETWORKS

Report Number: P348607

Luminaire Tested: **ARCH-N-PA1-40-750-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348607
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-14)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-40-750-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 740mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5541 lumens
Efficiency: N/A
Efficacy: 135.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 41
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: 28.75 FT

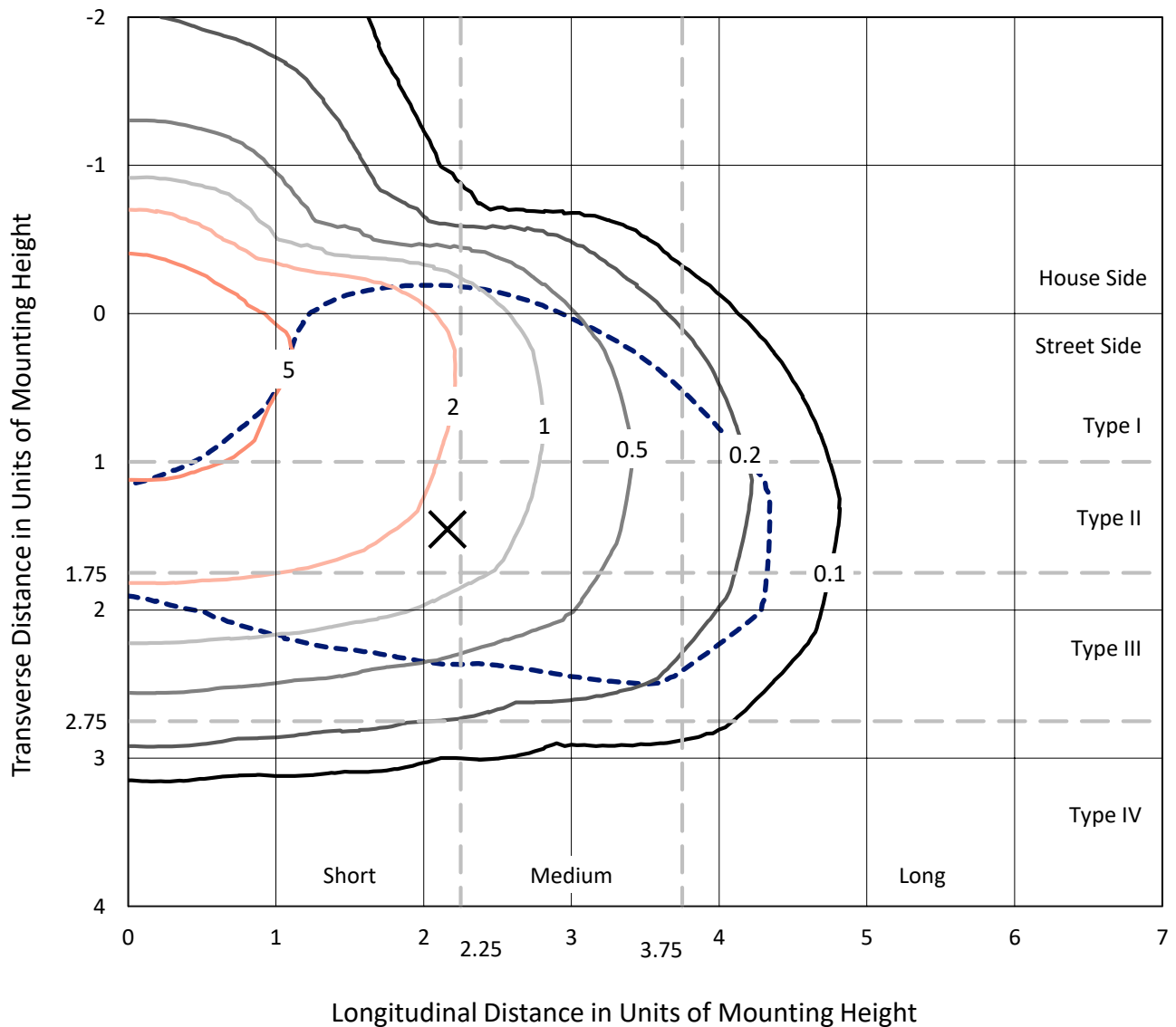


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

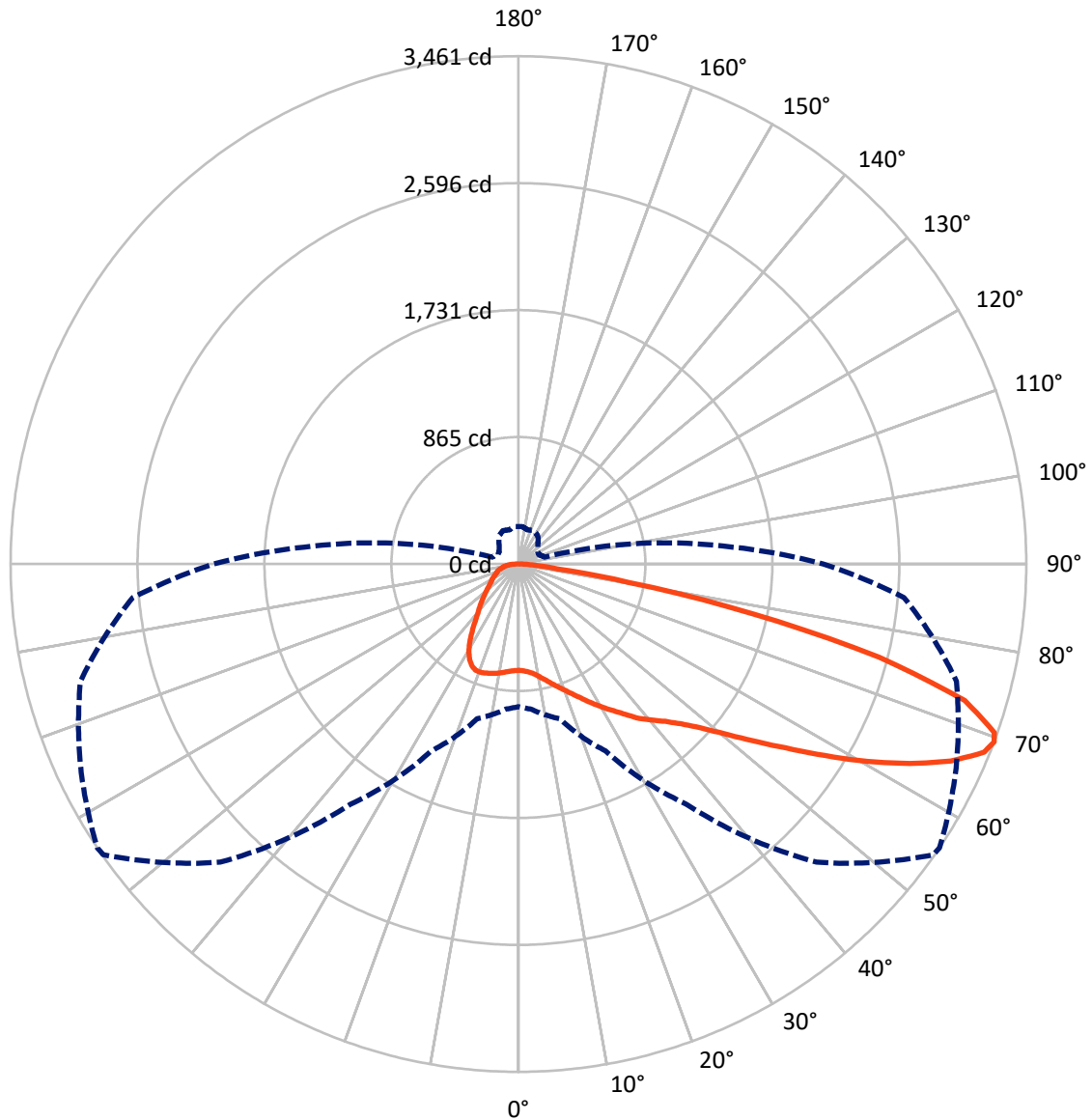


Based on 10 foot mounting height. Maximum calculated value = 7.9 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical



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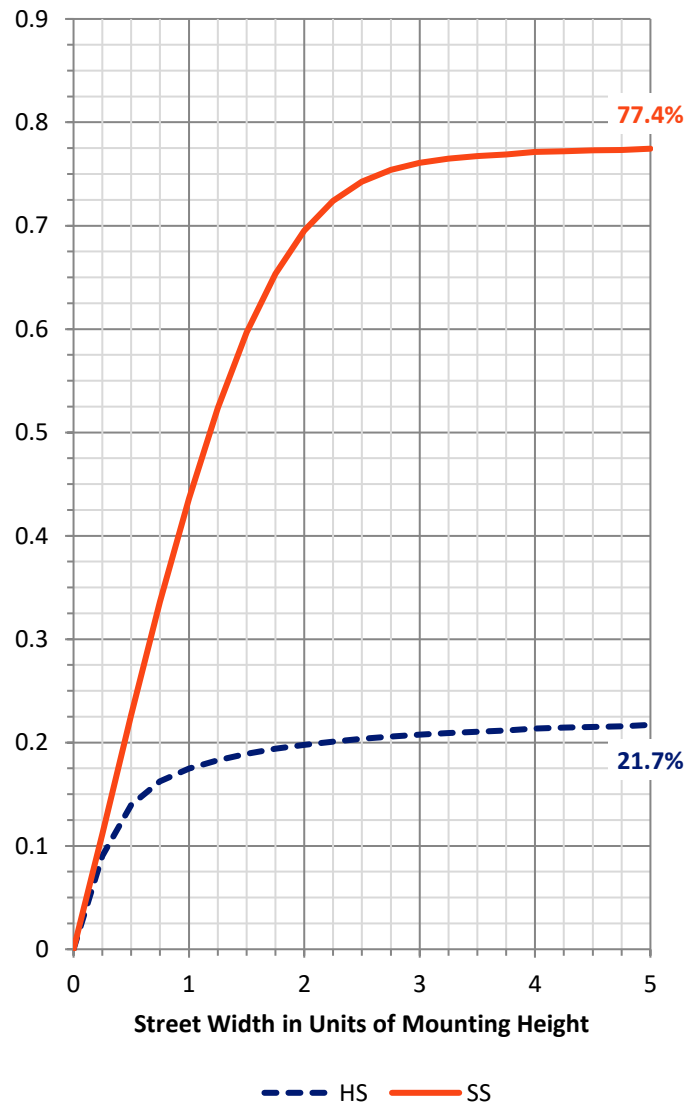
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1234.0	0.0	1234.0
	% Fixture	22.3	0.0	22.3
Street Side	Lumens	4307.0	0.0	4307.0
	% Fixture	77.7	0.0	77.7
Total	Lumens	5541.0	0.0	5541.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.1	1.3
10°-20°	228.8	4.1
20°-30°	399.4	7.2
30°-40°	573.7	10.4
40°-50°	793.9	14.3
50°-60°	1163.2	21.0
60°-70°	1418.2	25.6
70°-80°	784.1	14.2
80°-90°	108.6	2.0
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°-90°	5541.0	100.0
0°-180°	5541.0	100.0



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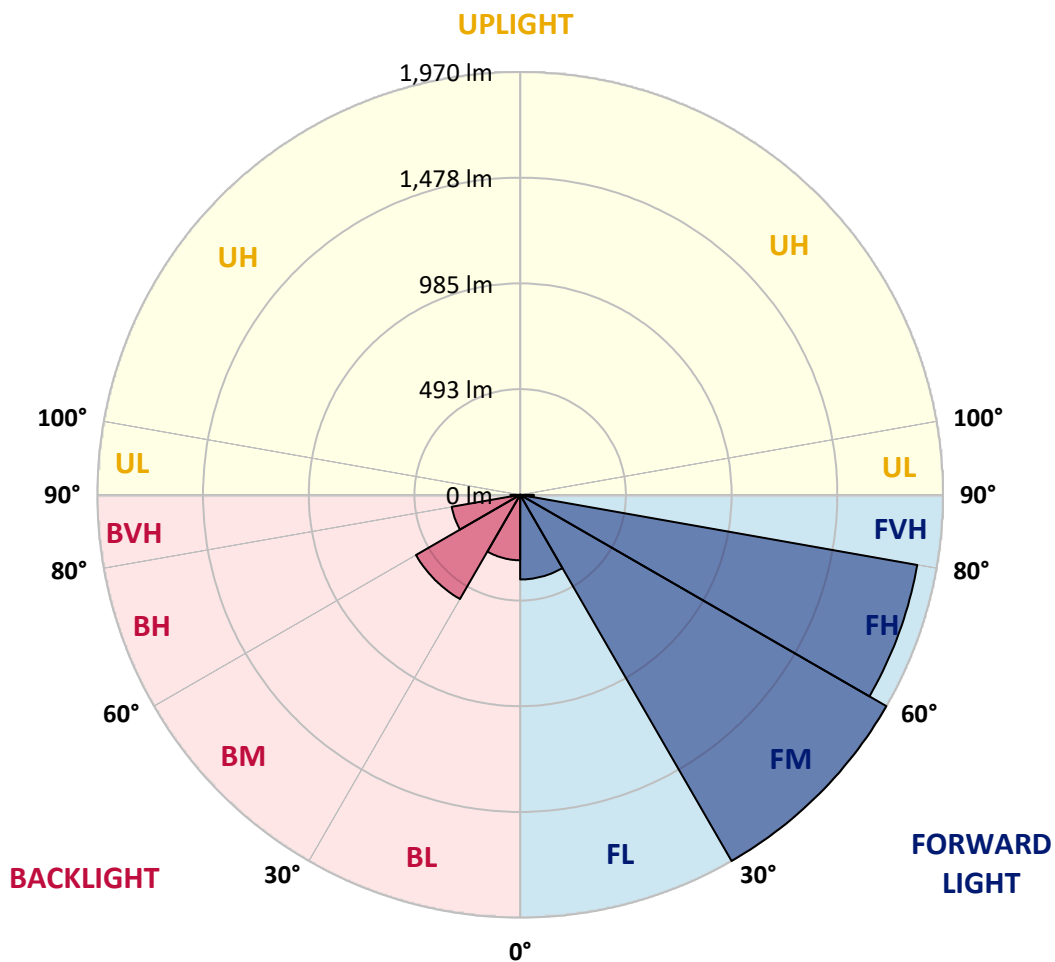
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	394.4	7.1			
FM	(30°-60°)	1970.0	35.6			
FH	(60°-80°)	1878.7	33.9			G2/5000
FVH	(80°-90°)	64.0	1.2			G1/100
BL	(0°-30°)	304.9	5.5	B1/500		
BM	(30°-60°)	560.8	10.1	B1/1000		
BH	(60°-80°)	323.6	5.8	B1/500		G1/500
BVH	(80°-90°)	44.6	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	724.4	724.4	724.4	724.4	724.4	724.4	724.4	724.4	724.4	724.4	724.4
2.5°	729.0	729.7	729.2	730.7	729.0	730.1	729.2	729.2	728.6	726.9	725.0
5°	740.4	742.0	741.0	742.5	740.4	740.8	739.1	739.1	737.4	733.8	729.9
7.5°	758.4	760.1	759.3	760.9	758.0	758.0	755.7	755.5	752.1	746.2	741.8
10°	779.8	782.0	781.3	783.6	781.3	782.0	779.8	779.8	775.2	766.8	761.2
12.5°	810.9	813.7	811.6	811.4	810.5	812.0	810.1	809.7	805.5	794.1	786.4
15°	852.5	855.5	851.1	850.8	845.4	844.8	844.8	844.3	841.6	827.9	815.3
17.5°	900.4	901.4	897.5	891.4	884.6	880.2	879.6	881.1	881.1	865.1	845.0
20°	947.4	949.1	946.0	939.1	930.4	923.9	919.3	922.3	922.2	903.1	874.6
22.5°	998.5	1002.5	997.9	989.2	978.8	971.6	963.6	966.3	966.4	943.0	903.6
25°	1064.7	1061.1	1058.3	1045.8	1031.2	1023.7	1016.3	1018.9	1018.2	985.9	933.6
27.5°	1123.3	1124.1	1120.3	1107.1	1090.1	1073.7	1073.3	1075.1	1072.2	1030.6	961.9
30°	1191.5	1191.9	1186.5	1174.7	1156.2	1135.0	1130.0	1132.9	1126.8	1073.0	991.6
32.5°	1259.3	1261.2	1255.2	1240.9	1226.0	1200.3	1190.3	1192.3	1177.0	1116.3	1022.4
35°	1318.6	1321.3	1319.4	1309.8	1293.6	1271.5	1259.6	1258.5	1239.6	1169.4	1063.0
37.5°	1379.1	1381.6	1379.5	1371.5	1365.0	1341.5	1335.2	1335.2	1302.4	1223.6	1114.8
40°	1441.4	1445.2	1442.7	1431.6	1426.1	1415.4	1400.3	1396.7	1361.2	1288.7	1199.1
42.5°	1499.2	1504.2	1514.1	1507.6	1496.3	1497.9	1467.5	1465.6	1439.6	1384.9	1305.1
45°	1581.3	1588.5	1605.3	1600.4	1598.1	1589.7	1553.6	1551.9	1542.0	1514.3	1436.6
47.5°	1670.8	1680.7	1711.1	1712.0	1736.7	1720.8	1671.8	1665.8	1668.1	1669.3	1597.1
50°	1753.3	1764.1	1814.0	1837.4	1895.5	1898.9	1820.5	1815.1	1824.1	1850.4	1784.2
52.5°	1819.1	1832.9	1895.1	1967.6	2067.1	2095.3	2003.5	1999.5	2006.2	2051.6	1995.7
55°	1867.4	1882.3	1950.1	2082.2	2241.0	2290.8	2214.2	2210.4	2214.6	2272.5	2225.7
57.5°	1878.7	1882.3	1980.6	2159.3	2387.8	2507.4	2472.1	2464.5	2443.9	2494.3	2479.6
60°	1825.8	1840.3	1955.4	2186.4	2501.3	2721.0	2741.7	2732.1	2674.3	2715.5	2703.7
62.5°	1718.5	1744.5	1861.3	2145.1	2545.8	2895.5	3006.0	2994.6	2894.9	2921.7	2864.8
65°	1543.3	1554.4	1677.1	2002.9	2489.3	3007.2	3241.8	3236.0	3110.6	3068.8	2894.6
67.5°	1229.9	1250.7	1354.9	1705.7	2258.2	2994.0	3424.1	3423.5	3251.5	3123.4	2789.0
69°	971.6	993.2	1092.4	1405.1	1998.2	2873.6	3454.6	3461.3	3291.2	3090.2	2638.2
70°	774.6	799.6	867.8	1183.5	1767.4	2714.7	3429.2	3441.2	3283.6	3035.4	2499.0
72.5°	329.7	349.9	398.4	610.1	1077.2	2027.2	3135.5	3180.9	3106.6	2778.1	2065.4
75°	143.9	150.2	172.2	248.7	478.2	1103.3	2456.3	2540.3	2656.3	2348.2	1538.5
77.5°	105.4	108.0	120.1	146.0	214.6	416.7	1579.6	1628.4	1915.7	1708.8	943.7
80°	81.5	83.4	92.8	107.3	140.1	168.6	720.4	762.4	1077.2	877.7	393.0
82.5°	64.9	66.2	72.7	79.0	96.8	102.1	239.2	265.3	397.6	242.4	104.0
85°	60.3	61.8	64.1	57.6	62.0	59.9	103.5	108.2	120.1	95.3	43.5
87.5°	27.3	32.3	63.6	44.9	33.0	26.3	42.4	44.3	49.8	50.0	19.3
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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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	724.4	724.4	724.4	724.4	724.4	724.4	724.4	724.4	724.4	724.4	724.4
2.5°	726.1	725.5	726.5	724.2	727.1	726.9	725.9	726.3	728.2	728.0	728.2
5°	730.5	730.1	731.3	729.6	733.0	734.1	734.3	736.0	738.1	738.7	738.7
7.5°	741.6	741.6	742.2	739.9	742.2	742.0	741.0	742.7	744.8	745.0	744.8
10°	760.7	760.9	759.9	754.0	752.1	746.9	742.2	742.3	745.0	747.1	747.7
12.5°	784.7	784.0	779.8	768.9	760.9	750.4	745.4	745.2	747.9	749.6	750.2
15°	812.2	810.1	799.2	781.5	767.4	757.0	749.0	747.1	745.6	743.7	743.9
17.5°	838.2	833.4	815.3	790.6	775.7	762.0	746.5	734.1	725.5	720.6	719.1
20°	864.5	855.2	829.0	799.2	780.3	755.3	725.5	700.4	684.7	677.4	676.1
22.5°	888.6	873.5	841.8	808.2	776.7	732.8	686.0	649.4	627.6	617.9	618.7
25°	912.0	891.0	855.2	814.5	758.4	693.1	631.1	586.0	560.8	549.9	549.6
27.5°	932.7	908.8	869.7	809.3	724.2	636.6	566.0	522.1	501.1	491.7	490.2
30°	956.3	931.1	888.9	789.7	674.2	571.3	502.4	471.5	456.6	447.2	445.5
32.5°	985.1	961.5	904.8	754.0	610.3	503.2	452.8	431.2	417.7	407.2	405.2
35°	1027.1	1001.6	908.8	702.8	540.0	449.3	416.3	394.2	375.8	362.3	361.0
37.5°	1079.8	1051.8	899.6	636.6	471.9	414.4	386.0	358.7	334.8	315.7	312.7
40°	1155.8	1113.4	874.2	560.2	421.7	387.5	356.4	325.3	295.7	273.3	269.0
42.5°	1247.0	1185.8	835.3	484.3	384.8	360.2	327.0	288.4	260.2	244.3	242.0
45°	1363.1	1261.0	781.3	417.8	348.6	332.9	295.3	259.8	242.2	230.6	228.7
47.5°	1495.6	1345.3	724.6	363.8	317.8	307.3	269.9	247.0	233.1	223.9	222.2
50°	1658.4	1440.6	664.5	319.5	286.9	276.6	257.9	239.9	228.9	221.8	220.1
52.5°	1842.0	1548.1	621.1	284.6	261.3	253.9	251.6	236.1	227.2	221.8	220.1
55°	2039.8	1657.4	574.4	255.2	239.2	241.3	247.4	236.5	230.4	223.9	221.4
57.5°	2237.7	1770.4	522.3	230.4	221.6	231.9	244.5	237.3	232.1	225.8	223.5
60°	2394.2	1842.0	441.5	209.6	207.7	221.6	237.6	231.5	224.9	225.1	224.7
62.5°	2467.4	1838.2	352.4	191.1	193.7	207.7	226.6	222.6	217.0	224.5	225.1
65°	2426.3	1746.6	274.3	174.3	178.9	193.2	215.1	218.2	220.1	234.4	236.3
67.5°	2254.1	1568.3	212.5	159.6	165.3	183.2	216.3	237.6	240.1	255.2	255.0
69°	2076.0	1401.1	184.6	151.9	158.6	185.7	231.2	250.1	240.7	256.7	254.4
70°	1926.8	1268.8	169.7	146.8	155.6	190.1	241.1	249.9	237.8	251.6	247.8
72.5°	1483.9	912.8	143.9	137.2	145.3	181.9	243.9	244.3	231.2	233.8	227.3
75°	1017.8	576.8	125.6	124.3	129.6	164.0	234.8	233.5	213.8	210.0	204.6
77.5°	561.2	293.0	106.7	111.9	115.5	145.3	213.4	211.5	195.3	187.3	185.3
80°	216.5	128.3	90.1	99.5	101.7	125.8	187.1	185.3	171.8	161.5	158.6
82.5°	81.7	67.2	74.4	86.1	85.3	103.8	158.4	157.5	144.3	129.2	124.6
85°	37.8	40.3	59.0	71.0	65.5	76.9	126.7	128.5	112.4	94.5	94.5
87.5°	16.0	22.5	41.8	53.6	44.1	51.9	93.0	88.8	81.5	56.5	53.1
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)