

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: P234719

Luminaire Tested: **ARCH-AF24-60-D-U-T3-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234719
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-60-D-U-T3-8027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5907 lumens
Efficiency: N/A
Efficacy: 92.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 64
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: 28.75 FT

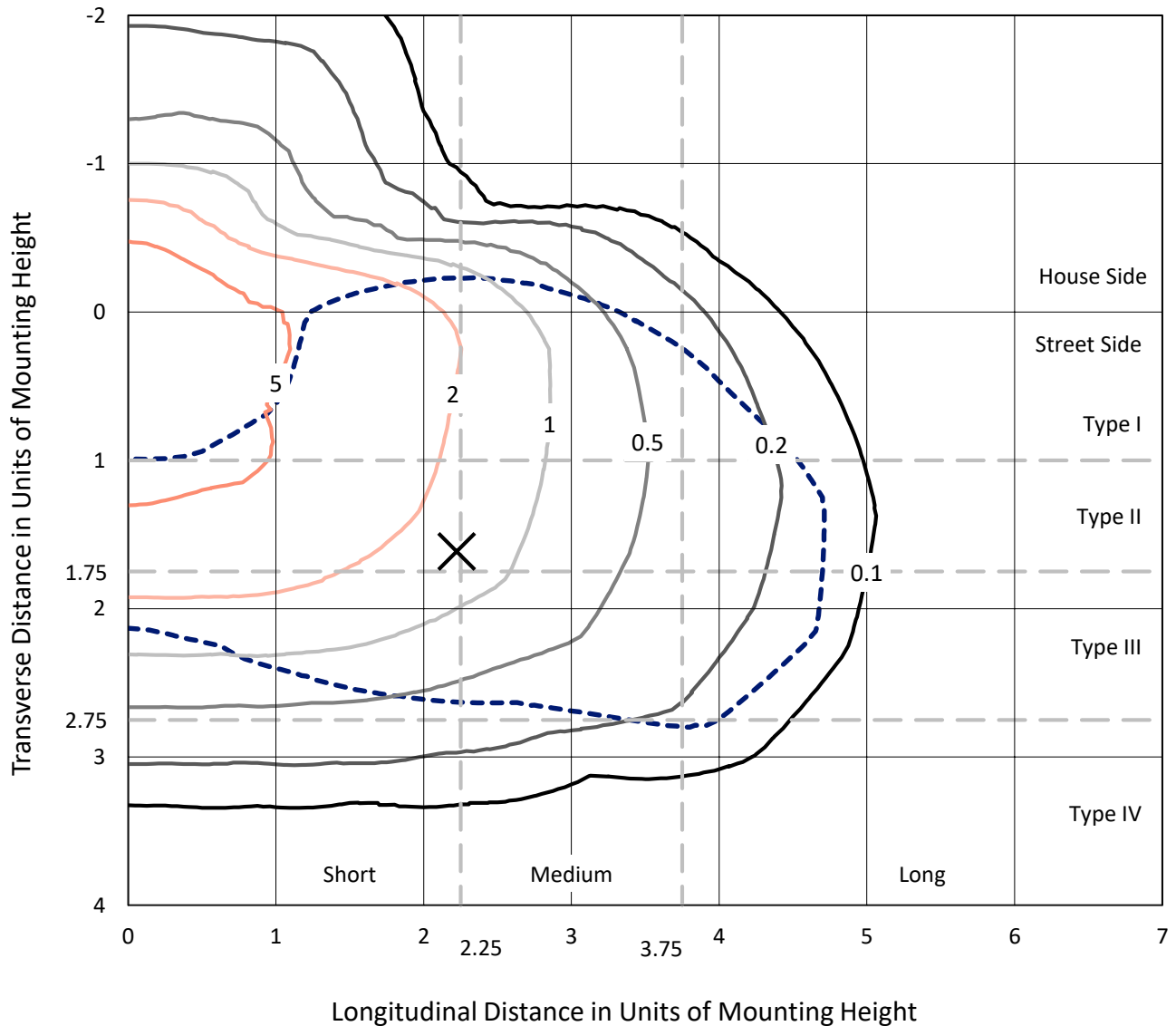


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

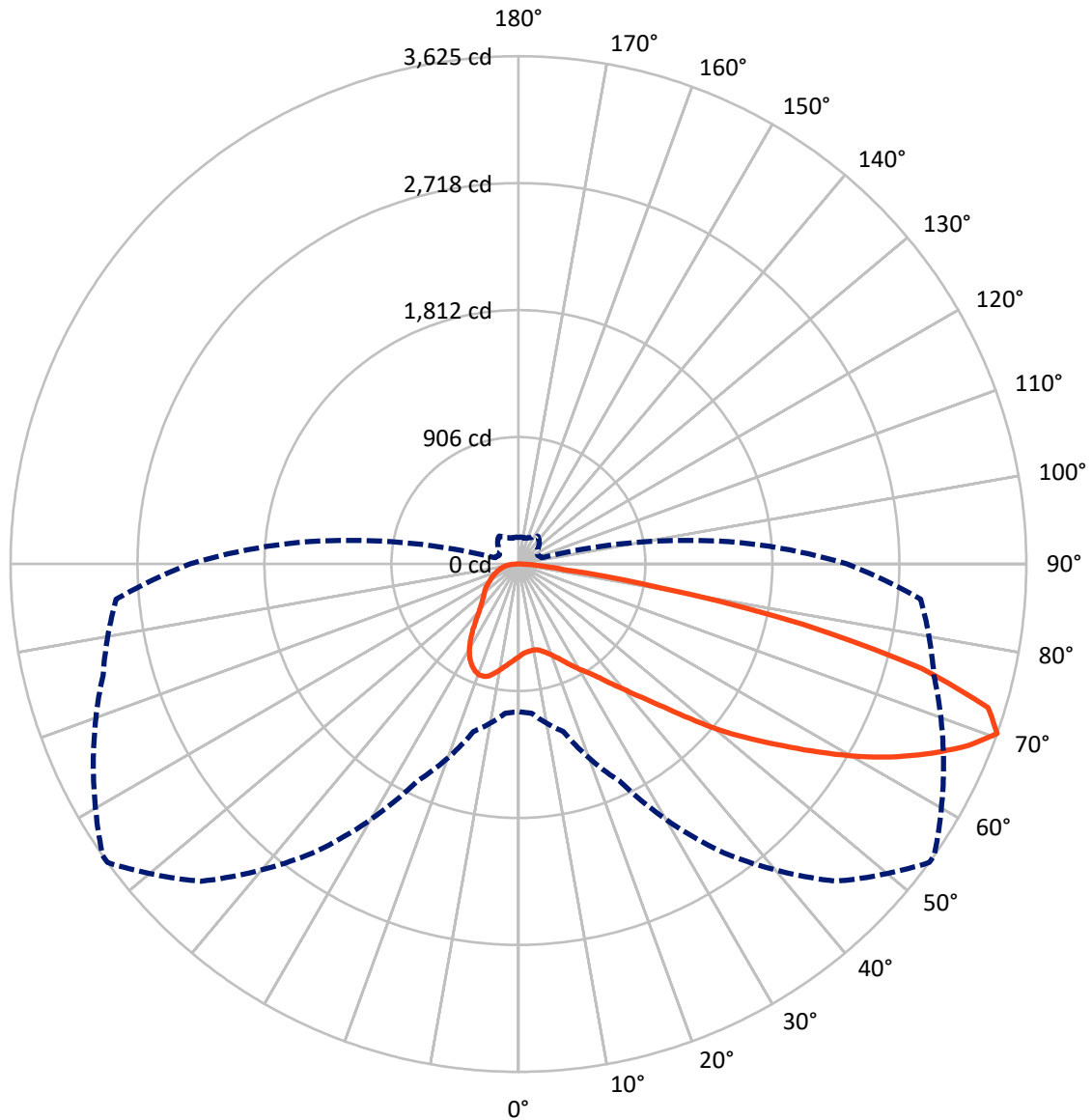


Based on 10 foot mounting height. Maximum calculated value = 7.7 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



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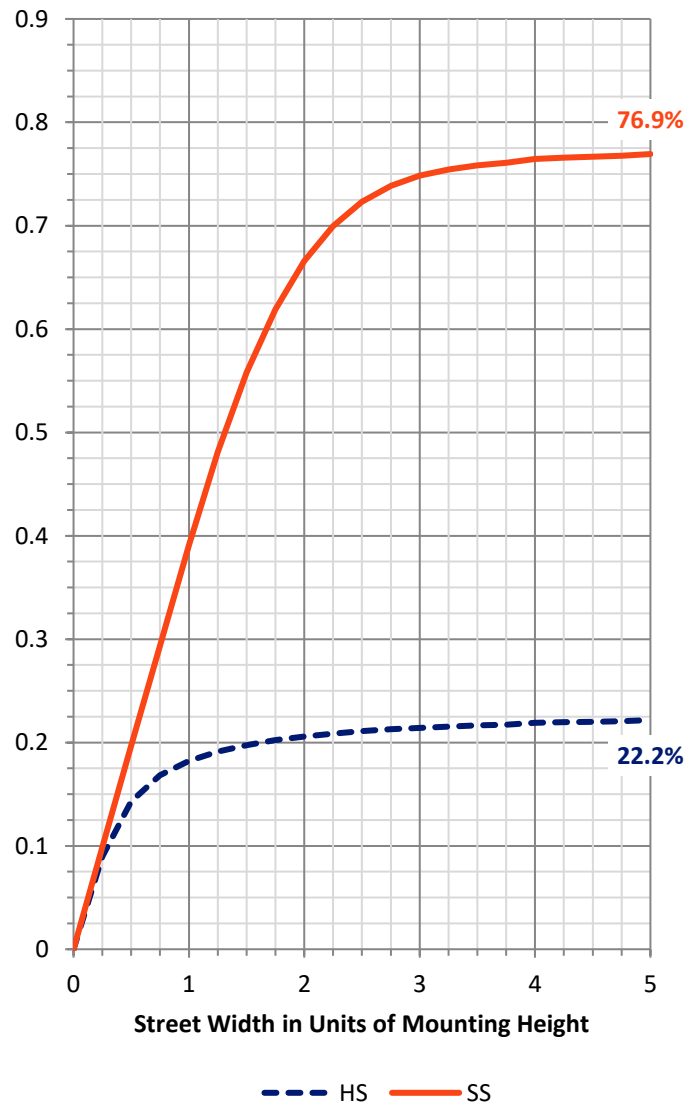
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1339.7	0.0	1339.7
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	4567.3	0.0	4567.3
	% Fixture	77.3	0.0	77.3
Total	Lumens	5907.0	0.0	5907.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.9	1.1
10°-20°	207.2	3.5
20°-30°	360.0	6.1
30°-40°	526.2	8.9
40°-50°	825.8	14.0
50°-60°	1269.9	21.5
60°-70°	1551.4	26.3
70°-80°	961.9	16.3
80°-90°	139.7	2.4
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°	5907.0	100.0
0°-180°	5907.0	100.0

Coefficient of Utilization



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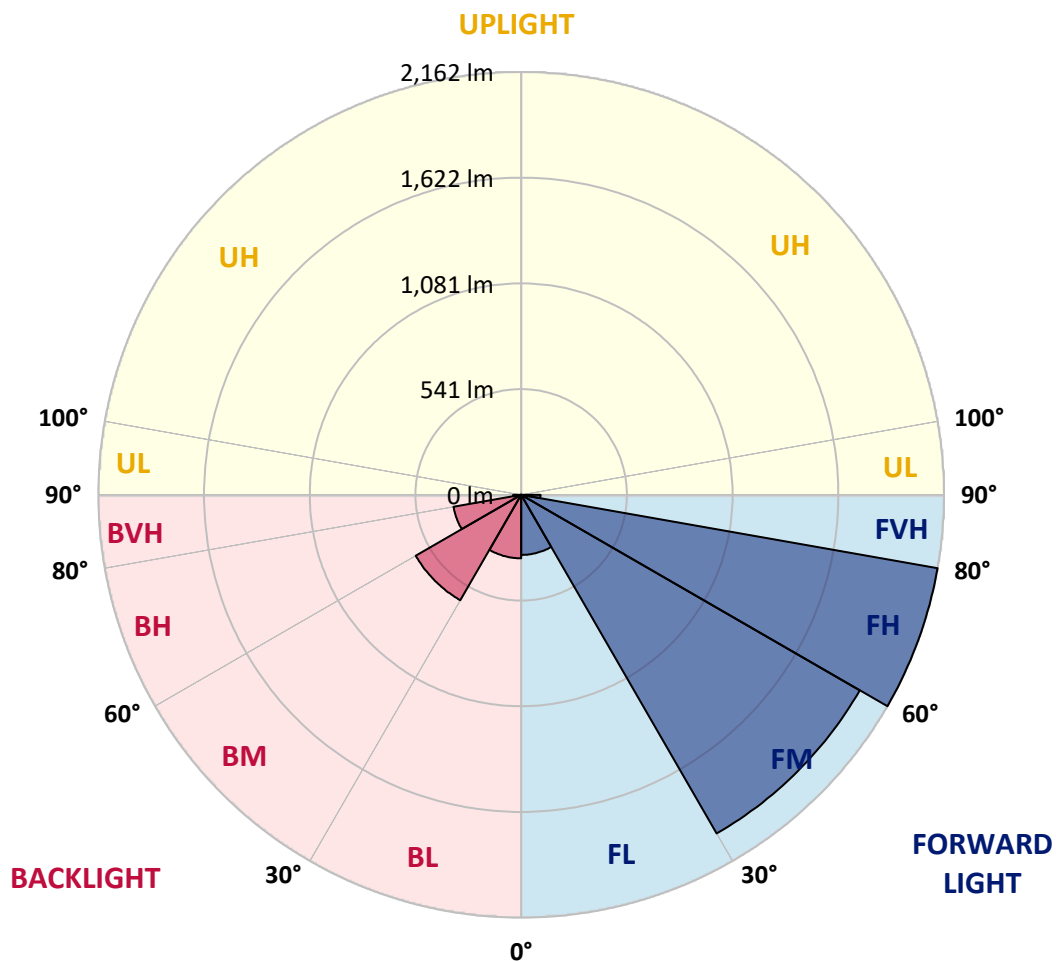
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	307.3	5.2			
FM	(30°-60°)	1999.3	33.8			
FH	(60°-80°)	2162.1	36.6			G2/5000
FVH	(80°-90°)	98.7	1.7			G1/100
BL	(0°-30°)	324.8	5.5	B1/500		
BM	(30°-60°)	622.5	10.5	B1/1000		
BH	(60°-80°)	351.3	5.9	B1/500		G1/500
BVH	(80°-90°)	41.1	0.7			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°	54°	55°	65°	75°	85°
0°	660.9	660.9	660.9	660.9	660.9	660.9	660.9	660.9	660.9	660.9	660.9
2.5°	634.9	632.8	632.8	636.0	637.1	640.3	640.3	641.4	644.6	650.1	656.5
5°	615.4	614.4	615.4	619.8	621.9	628.4	630.6	631.7	638.2	646.8	656.5
7.5°	596.0	594.9	597.1	603.5	610.0	619.8	625.2	626.3	636.0	647.9	660.9
10°	589.5	588.4	591.6	597.1	603.5	614.4	623.0	624.1	638.2	652.2	670.6
12.5°	598.1	597.1	600.3	605.7	612.2	619.8	629.5	630.6	649.0	667.4	686.8
15°	619.8	619.8	620.9	624.1	630.6	637.1	645.7	646.8	666.3	687.9	707.4
17.5°	653.3	651.1	651.1	650.1	654.4	657.6	668.4	669.5	690.1	709.5	729.0
20°	694.4	693.3	689.0	683.6	682.5	684.7	695.5	696.6	717.1	733.3	751.7
22.5°	744.2	745.2	735.5	723.6	718.2	721.4	731.2	732.3	747.4	761.5	777.7
25°	810.1	806.9	792.8	775.5	764.7	764.7	774.4	774.4	788.5	797.2	808.0
27.5°	872.9	866.4	853.4	828.5	811.2	814.5	824.2	824.2	837.2	840.4	845.8
30°	941.0	934.5	918.3	886.9	864.2	862.1	874.0	872.9	890.2	889.1	884.8
32.5°	1024.3	1021.1	994.0	954.0	923.7	916.1	927.0	928.0	938.9	935.6	921.5
35°	1141.1	1140.0	1115.2	1044.9	1004.8	990.8	997.3	997.3	1004.8	996.2	972.4
37.5°	1288.2	1290.4	1268.7	1164.9	1108.7	1084.9	1086.0	1084.9	1087.0	1077.3	1052.4
40°	1435.3	1440.7	1439.6	1314.2	1242.8	1201.7	1186.5	1184.4	1189.8	1185.5	1161.7
42.5°	1628.9	1641.9	1611.6	1498.1	1418.0	1348.8	1307.7	1302.3	1314.2	1319.6	1296.9
45°	1830.1	1825.8	1778.2	1696.0	1623.5	1534.8	1457.0	1448.3	1457.0	1473.2	1449.4
47.5°	1935.0	1931.8	1919.9	1878.8	1868.0	1766.3	1648.4	1640.8	1624.6	1647.3	1619.2
50°	2108.1	2111.3	2062.7	2058.3	2103.8	2047.5	1864.7	1847.4	1818.2	1836.6	1812.8
52.5°	2233.6	2219.5	2189.2	2227.1	2368.8	2338.5	2068.1	2060.5	2033.5	2029.1	2018.3
55°	2284.4	2284.4	2289.8	2377.4	2579.7	2539.7	2288.7	2296.3	2259.5	2229.2	2243.3
57.5°	2299.5	2306.0	2352.5	2497.5	2827.4	2696.5	2532.1	2542.9	2489.9	2429.3	2473.7
60°	2224.9	2244.4	2355.8	2565.6	2966.9	2863.1	2788.4	2791.7	2714.9	2626.2	2704.1
62.5°	2033.5	2057.3	2256.3	2593.7	2944.2	3034.0	3030.7	3038.3	2933.4	2823.0	2920.4
65°	1798.7	1822.5	2034.5	2514.8	2926.9	3156.2	3252.5	3273.0	3137.8	2989.6	3055.6
67.5°	1453.7	1485.1	1686.3	2248.7	2842.5	3256.8	3460.1	3481.8	3295.7	3076.1	3043.7
70°	1053.5	1068.6	1237.4	1709.0	2498.6	3201.6	3624.5	3623.4	3347.6	3069.7	2881.5
72.5°	507.3	519.2	665.2	1061.1	1786.8	2717.0	3505.6	3526.1	3276.2	2975.6	2510.5
75°	208.8	220.7	269.3	447.8	937.8	1795.5	2971.2	3019.9	2975.6	2670.5	1964.2
77.5°	129.8	134.1	157.9	231.5	428.3	838.3	2080.0	2145.9	2357.9	2139.5	1296.9
80°	97.3	100.6	117.9	162.2	270.4	309.3	1033.0	1116.2	1428.8	1227.6	587.3
82.5°	81.1	82.2	94.1	117.9	183.9	177.4	331.0	368.8	666.3	468.3	202.3
85°	75.7	77.9	84.4	84.4	116.8	111.4	137.4	143.9	193.6	160.1	70.3
87.5°	38.9	36.8	74.6	66.0	60.6	54.1	58.4	62.7	72.5	76.8	31.4
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°	660.9	660.9	660.9	660.9	660.9	660.9	660.9	660.9	660.9	660.9	660.9
2.5°	658.7	662.0	667.4	672.8	679.3	686.8	691.2	696.6	700.9	698.7	697.6
5°	662.0	667.4	679.3	690.1	703.1	718.2	727.9	738.8	747.4	749.6	746.3
7.5°	667.4	677.1	693.3	712.8	730.1	749.6	764.7	779.9	790.7	792.8	792.8
10°	680.3	691.2	712.8	738.8	759.3	779.9	797.2	809.1	818.8	823.1	823.1
12.5°	698.7	711.7	737.7	769.0	791.8	811.2	821.0	826.4	830.7	835.0	836.1
15°	720.4	734.4	765.8	799.3	823.1	832.9	832.9	831.8	831.8	833.9	836.1
17.5°	742.0	757.1	789.6	825.3	840.4	835.0	827.4	824.2	822.0	821.0	824.2
20°	764.7	779.9	812.3	845.8	841.5	818.8	808.0	800.4	793.9	790.7	795.0
22.5°	789.6	803.6	837.2	859.9	827.4	792.8	772.3	760.4	749.6	743.1	747.4
25°	818.8	832.9	865.3	864.2	802.6	753.9	721.4	702.0	690.1	683.6	683.6
27.5°	853.4	865.3	896.7	853.4	768.0	702.0	654.4	636.0	632.8	627.3	627.3
30°	889.1	898.8	925.9	828.5	720.4	633.8	581.9	573.3	574.3	568.9	570.0
32.5°	925.9	935.6	943.2	791.8	658.7	557.0	522.4	515.9	514.9	510.5	506.2
35°	977.8	991.9	945.3	742.0	584.1	493.2	468.3	461.9	455.4	440.2	440.2
37.5°	1056.7	1071.9	939.9	680.3	507.3	443.5	420.8	412.1	401.3	386.1	380.7
40°	1164.9	1164.9	928.0	611.1	445.6	403.4	381.8	371.0	359.1	344.0	340.7
42.5°	1292.5	1262.3	909.6	540.8	400.2	376.4	356.9	345.0	331.0	313.7	311.5
45°	1441.8	1359.6	883.7	478.1	366.7	360.2	348.3	327.7	303.9	285.5	282.3
47.5°	1586.7	1447.2	858.8	433.7	338.5	353.7	344.0	309.3	276.9	250.9	247.7
50°	1745.7	1525.1	829.6	397.0	316.9	349.4	338.5	282.3	246.6	228.2	226.1
52.5°	1904.7	1604.1	798.2	358.0	298.5	340.7	325.6	262.8	245.5	220.7	217.4
55°	2072.4	1696.0	761.5	314.8	276.9	323.4	308.3	261.8	253.1	220.7	213.1
57.5°	2235.7	1797.7	702.0	272.6	253.1	297.4	301.8	255.3	236.9	218.5	209.8
60°	2416.4	1905.8	603.5	236.9	232.5	275.8	293.1	241.2	218.5	212.0	207.7
62.5°	2561.3	2003.2	471.6	212.0	215.2	258.5	282.3	232.5	210.9	205.5	204.4
65°	2624.0	2005.3	338.5	190.4	197.9	242.3	271.5	225.0	204.4	202.3	201.2
67.5°	2558.0	1895.0	238.0	169.8	179.6	227.1	257.4	217.4	197.9	199.0	196.9
70°	2345.0	1662.5	174.1	150.3	162.2	210.9	242.3	207.7	190.4	192.5	189.3
72.5°	1962.1	1295.8	139.5	134.1	148.2	193.6	227.1	196.9	178.5	179.6	173.1
75°	1449.4	858.8	116.8	120.1	132.0	177.4	207.7	182.8	165.5	161.2	156.8
77.5°	862.1	441.3	96.3	104.9	117.9	157.9	186.0	165.5	151.4	143.9	140.6
80°	355.9	178.5	79.0	88.7	102.8	140.6	164.4	144.9	135.2	127.6	123.3
82.5°	141.7	87.6	62.7	72.5	86.5	122.2	143.9	127.6	117.9	112.5	100.6
85°	54.1	43.3	42.2	50.8	64.9	94.1	119.0	107.1	99.5	85.4	82.2
87.5°	21.6	19.5	19.5	24.9	36.8	59.5	85.4	74.6	77.9	61.7	62.7
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)