

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: P265984

Luminaire Tested: **ARCH-AF24-90-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265984
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-90-D-U-T4W-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6006.6 lumens
Efficiency: N/A
Efficacy: 63.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 94
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

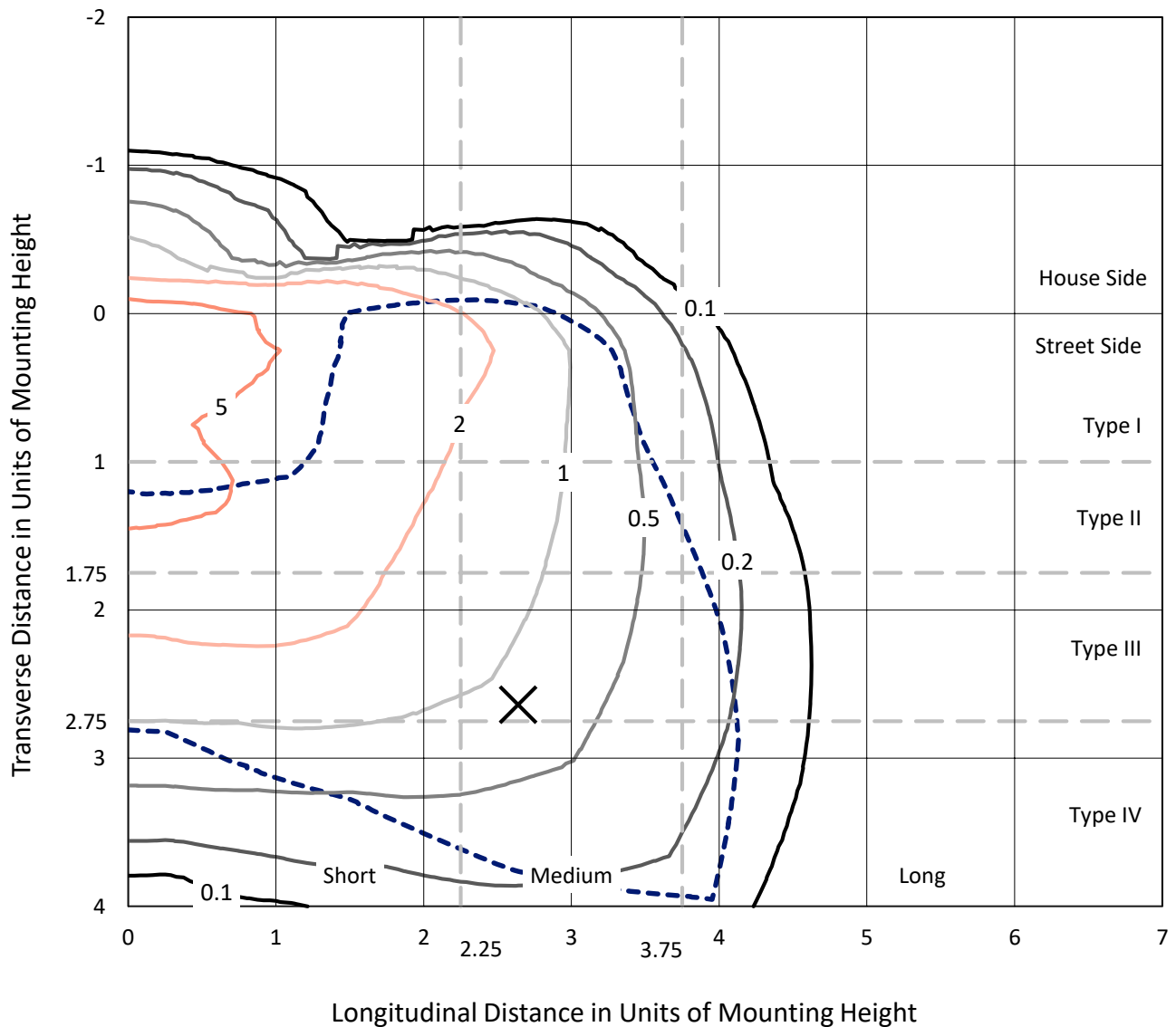


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

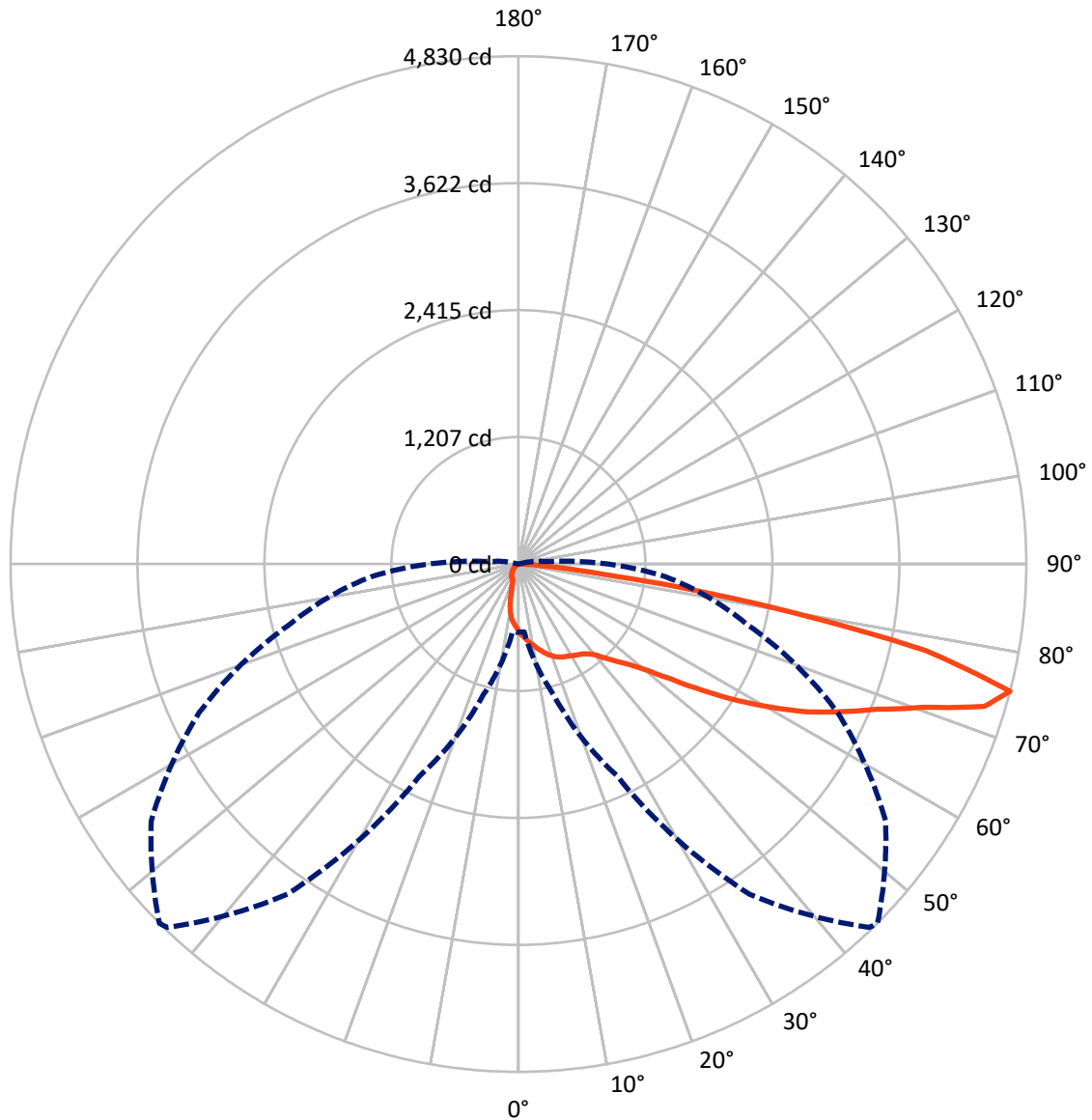


Based on 10 foot mounting height. Maximum calculated value = 8.6 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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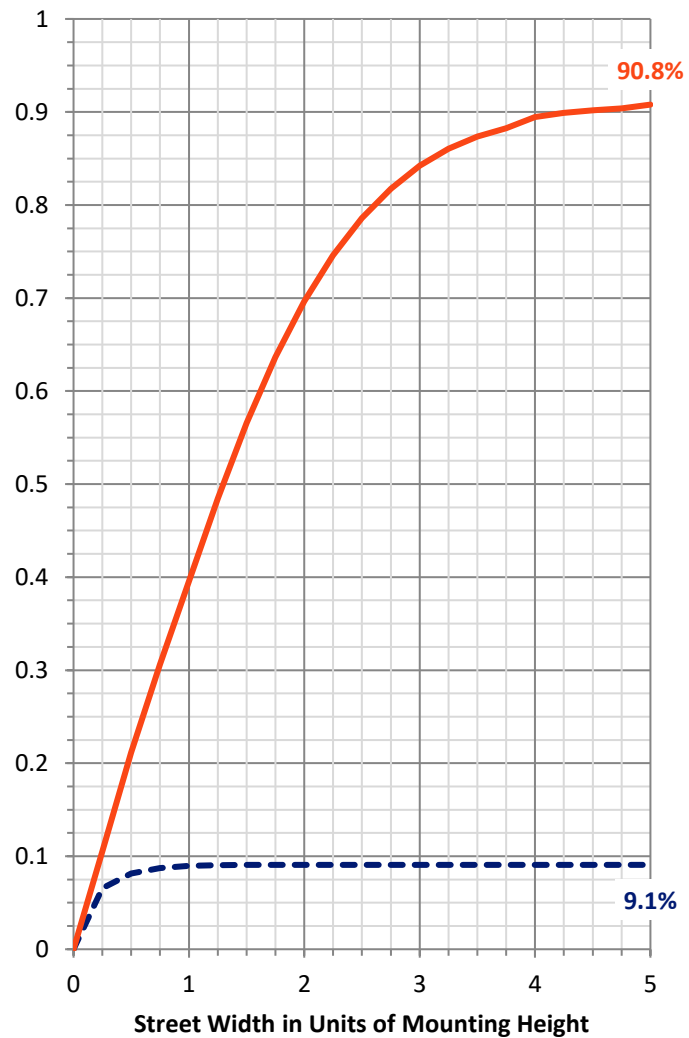
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	549.4	0.0	549.4
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	5457.2	0.0	5457.2
	% Fixture	90.9	0.0	90.9
Total	Lumens	6006.6	0.0	6006.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.6	1.0
10°-20°	171.8	2.9
20°-30°	284.5	4.7
30°-40°	411.7	6.9
40°-50°	674.2	11.2
50°-60°	1201.2	20.0
60°-70°	1765.9	29.4
70°-80°	1332.2	22.2
80°-90°	104.5	1.7
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°	6006.6	100.0
0°-180°	6006.6	100.0



--- HS — SS

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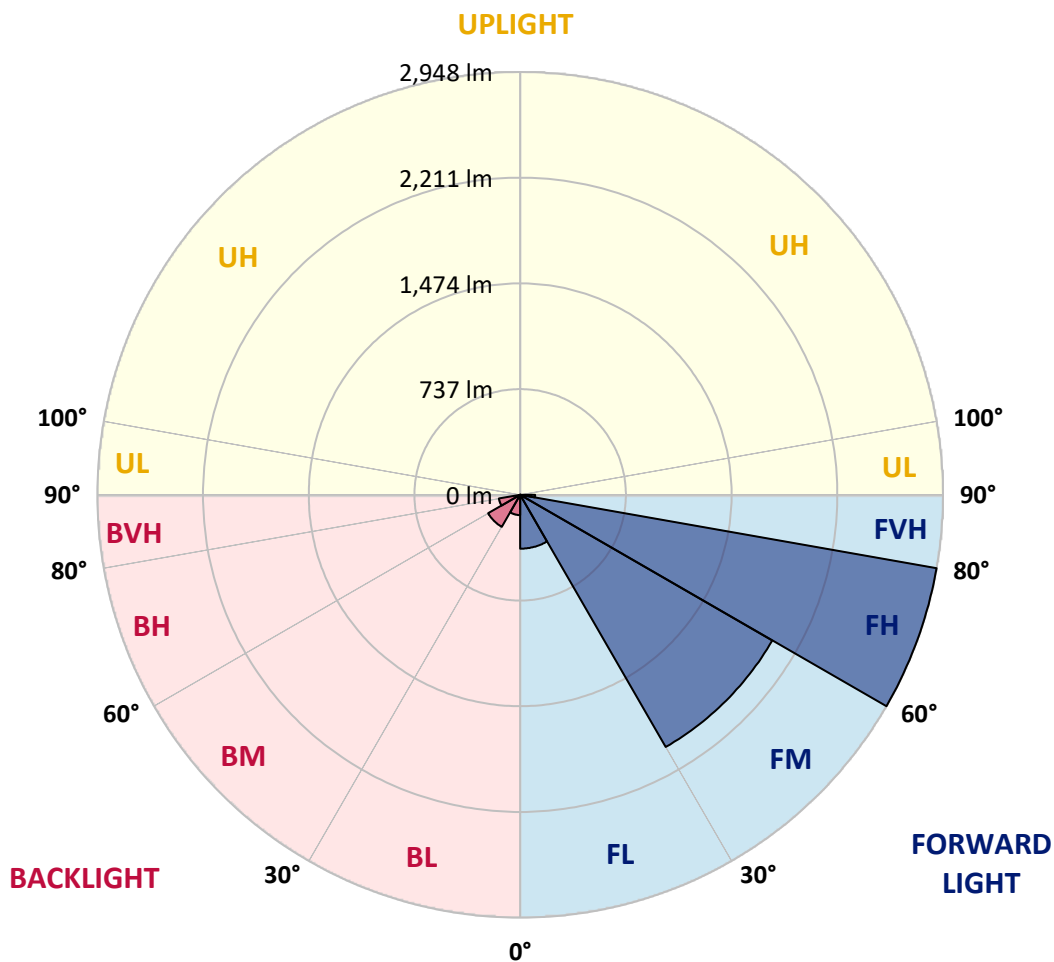
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	375.7	6.3			
FM	(30°-60°)	2029.6	33.8			
FH	(60°-80°)	2947.7	49.1			G2/5000
FVH	(80°-90°)	104.2	1.7			G2/225
BL	(0°-30°)	141.2	2.4	B1/500		
BM	(30°-60°)	257.5	4.3	B1/1000		
BH	(60°-80°)	150.5	2.5	B1/500		G1/500
BVH	(80°-90°)	0.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	642.5	642.5	642.5	642.5	642.5	642.5	642.5	642.5	642.5	642.5	642.5
2.5°	697.9	697.9	696.5	695.0	687.9	680.8	679.4	675.2	662.3	653.8	645.3
5°	756.2	757.6	754.8	747.6	731.9	716.4	715.0	703.6	679.4	662.3	643.8
7.5°	811.6	814.5	807.3	794.6	776.0	753.3	751.9	730.6	699.3	675.2	648.1
10°	858.5	858.5	848.4	832.9	813.0	788.8	785.9	761.9	726.3	696.5	661.0
12.5°	909.7	908.2	894.1	872.8	849.9	827.2	825.8	796.0	761.9	723.5	679.4
15°	956.5	953.7	935.2	915.4	891.2	867.0	865.5	835.8	800.2	754.8	706.3
17.5°	982.1	980.7	963.7	943.8	923.8	905.4	904.0	872.8	834.3	787.5	733.3
20°	986.3	987.9	973.7	956.5	945.1	935.2	935.2	906.7	865.5	815.8	761.9
22.5°	987.9	992.1	982.1	959.4	956.5	958.0	960.8	938.1	895.4	848.4	791.6
25°	997.7	1003.4	996.4	969.4	966.4	976.5	979.3	969.4	931.0	884.1	825.8
27.5°	1017.7	1023.3	1017.7	983.6	979.3	989.3	992.1	997.7	969.4	918.2	861.4
30°	1057.5	1058.9	1046.0	1003.4	995.0	1007.7	1012.0	1027.7	1004.8	950.9	895.4
32.5°	1127.2	1112.9	1074.6	1017.7	1010.6	1024.7	1029.1	1046.0	1037.6	982.1	931.0
35°	1269.2	1195.4	1107.3	1037.6	1030.4	1044.6	1050.4	1074.6	1078.9	1026.3	975.0
37.5°	1267.9	1201.0	1184.0	1076.0	1066.0	1076.0	1083.0	1112.9	1130.0	1084.4	1039.0
40°	1357.3	1329.0	1329.0	1148.5	1115.8	1130.0	1137.1	1166.9	1196.7	1161.1	1114.3
42.5°	1638.8	1620.4	1600.4	1287.7	1185.5	1225.2	1229.5	1247.9	1283.5	1272.1	1216.7
45°	1952.9	1935.8	1859.1	1523.6	1304.8	1311.9	1321.9	1351.7	1402.9	1424.3	1358.7
47.5°	2198.8	2181.8	2116.3	1808.0	1490.9	1428.5	1428.5	1486.8	1566.4	1620.4	1557.8
50°	2396.4	2376.5	2336.8	2110.7	1796.6	1596.2	1587.7	1655.8	1773.9	1857.7	1815.0
52.5°	2588.2	2529.9	2505.8	2423.4	2142.0	1839.2	1816.5	1864.8	2028.3	2131.9	2096.5
55°	2716.1	2707.6	2682.1	2710.5	2504.5	2134.8	2115.0	2124.9	2329.6	2399.3	2355.1
57.5°	2835.6	2834.2	2891.0	3023.2	2899.5	2473.2	2441.9	2426.2	2621.0	2603.8	2642.3
60°	2983.5	2957.8	3090.0	3279.1	3261.9	2802.9	2767.4	2736.1	2844.2	2795.7	2986.2
62.5°	2990.5	2983.5	3252.0	3523.5	3621.5	3138.3	3097.0	2984.8	3038.8	2983.5	3314.6
65°	2719.0	2754.6	3320.2	3652.9	3922.9	3432.6	3382.7	3207.9	3212.2	3175.2	3701.1
67.5°	2657.9	2676.4	3132.6	3792.1	4140.4	3729.7	3682.7	3465.2	3414.1	3417.0	3930.1
70°	2505.8	2534.3	2899.5	3782.1	4312.4	4126.2	4079.3	3843.3	3719.6	3581.8	3753.7
72.5°	1914.6	1962.8	2443.3	3316.1	4265.4	4645.0	4632.1	4322.3	3842.0	3289.0	2839.8
75°	648.1	646.7	1283.5	2227.3	3831.9	4804.1	4829.6	4262.5	3351.5	2268.5	1410.0
77.5°	139.2	140.8	264.5	902.5	2545.5	3857.5	3955.5	3215.0	2161.9	1010.6	322.6
80°	68.2	69.7	109.5	238.8	1017.7	2163.3	2316.8	1653.1	798.9	201.8	54.0
82.5°	34.1	35.6	56.9	126.5	376.7	768.9	821.5	608.3	228.9	113.7	26.9
85°	12.8	12.8	28.4	75.4	171.9	180.5	221.7	176.2	137.9	92.3	7.0
87.5°	2.9	2.9	15.6	37.0	76.7	56.9	56.9	54.0	83.8	62.5	2.9
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°	642.5	642.5	642.5	642.5	642.5	642.5	642.5	642.5	642.5	642.5	642.5
2.5°	641.0	635.3	625.4	615.5	608.3	599.8	595.5	591.3	589.8	588.4	591.3
5°	633.9	625.4	607.0	591.3	577.2	565.8	557.2	548.7	544.4	541.5	542.9
7.5°	633.9	621.1	594.0	570.0	547.2	523.1	498.9	480.5	466.2	457.6	459.2
10°	641.0	624.0	588.4	555.7	513.1	462.0	409.4	369.6	342.6	327.0	327.0
12.5°	656.7	633.9	589.8	538.8	466.2	376.7	297.1	248.7	228.9	217.5	218.8
15°	678.0	651.0	597.0	515.9	400.9	280.0	207.5	176.2	176.2	179.1	180.5
17.5°	702.1	672.3	602.7	481.9	316.9	200.4	163.4	160.5	164.8	171.9	171.9
20°	726.3	693.6	605.5	427.9	237.3	159.2	154.9	154.9	157.7	164.8	166.2
22.5°	756.2	720.6	602.7	360.9	177.7	150.6	149.3	149.3	149.3	157.7	157.7
25°	787.5	751.9	591.3	290.0	150.6	144.9	143.5	142.1	142.1	149.3	150.6
27.5°	822.9	784.6	564.2	221.7	142.1	139.2	137.9	135.0	135.0	140.8	140.8
30°	858.5	821.5	523.1	167.8	135.0	133.6	130.8	127.9	125.0	130.8	130.8
32.5°	896.9	859.9	469.0	133.6	125.0	125.0	123.6	119.4	116.5	119.4	120.8
35°	948.0	904.0	407.9	116.5	112.3	112.3	112.3	110.9	105.2	108.1	108.1
37.5°	1016.3	965.0	336.9	108.1	102.3	99.5	99.5	99.5	95.2	96.7	96.7
40°	1102.9	1036.1	268.7	100.9	95.2	88.2	85.2	86.6	83.8	83.8	82.5
42.5°	1220.9	1112.9	201.8	95.2	89.6	79.6	73.9	72.6	69.7	68.2	68.2
45°	1390.0	1206.8	144.9	89.6	85.2	69.7	64.0	59.6	52.6	48.2	48.2
47.5°	1609.0	1313.3	108.1	83.8	80.9	61.2	54.0	45.5	35.6	32.7	32.7
50°	1876.2	1432.6	91.0	75.4	73.9	54.0	42.6	29.9	19.9	17.1	18.4
52.5°	2136.3	1544.9	80.9	66.8	65.3	46.9	31.4	15.6	8.5	8.5	8.5
55°	2355.1	1624.6	73.9	59.6	56.9	37.0	17.1	7.0	4.2	4.2	4.2
57.5°	2552.8	1670.0	66.8	52.6	45.5	25.6	7.0	2.9	2.9	1.3	1.3
60°	2733.3	1697.1	58.3	45.5	35.6	14.3	2.9	1.3	1.3	0.0	0.0
62.5°	2910.9	1717.0	49.8	37.0	26.9	5.7	1.3	1.3	0.0	0.0	0.0
65°	3046.0	1709.8	39.7	29.9	17.1	2.9	1.3	0.0	0.0	0.0	0.0
67.5°	3041.8	1613.3	29.9	22.7	8.5	1.3	0.0	0.0	0.0	0.0	0.0
70°	2720.4	1358.7	19.9	14.3	2.9	1.3	0.0	0.0	0.0	0.0	0.0
72.5°	1930.2	871.3	12.8	8.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	849.9	264.5	7.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	166.2	61.2	4.2	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	39.7	7.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	17.1	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.2	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)