

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: P265802

Luminaire Tested: **ARCH-M-AF48-90-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265802
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-90-D-U-T3-7027-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 600mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8036.4 lumens
Efficiency: N/A
Efficacy: 87.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 92
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

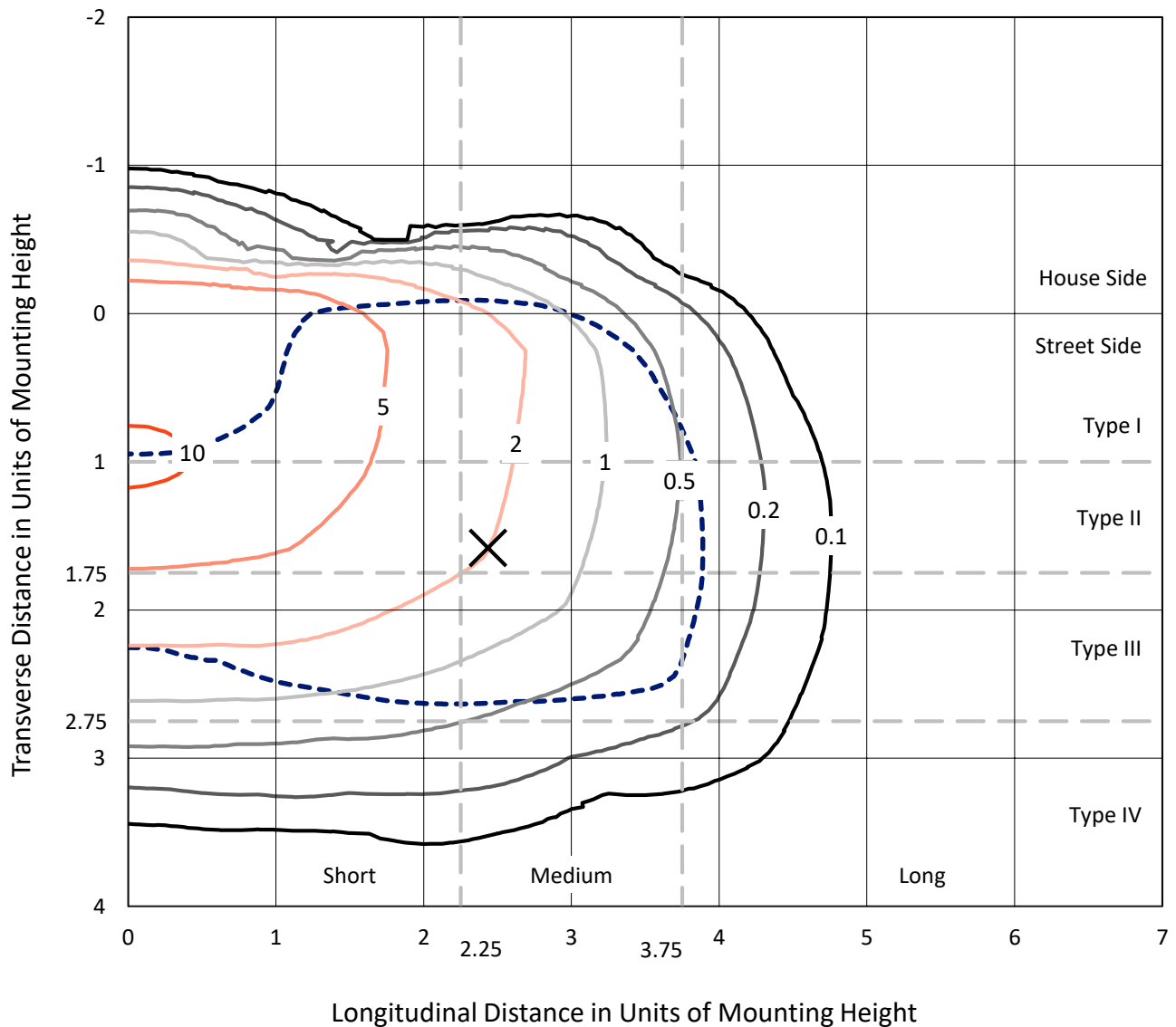


REPORT NUMBER: P265802

CATALOG NUMBER: ARCH-M-AF48-90-D-U-T3-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

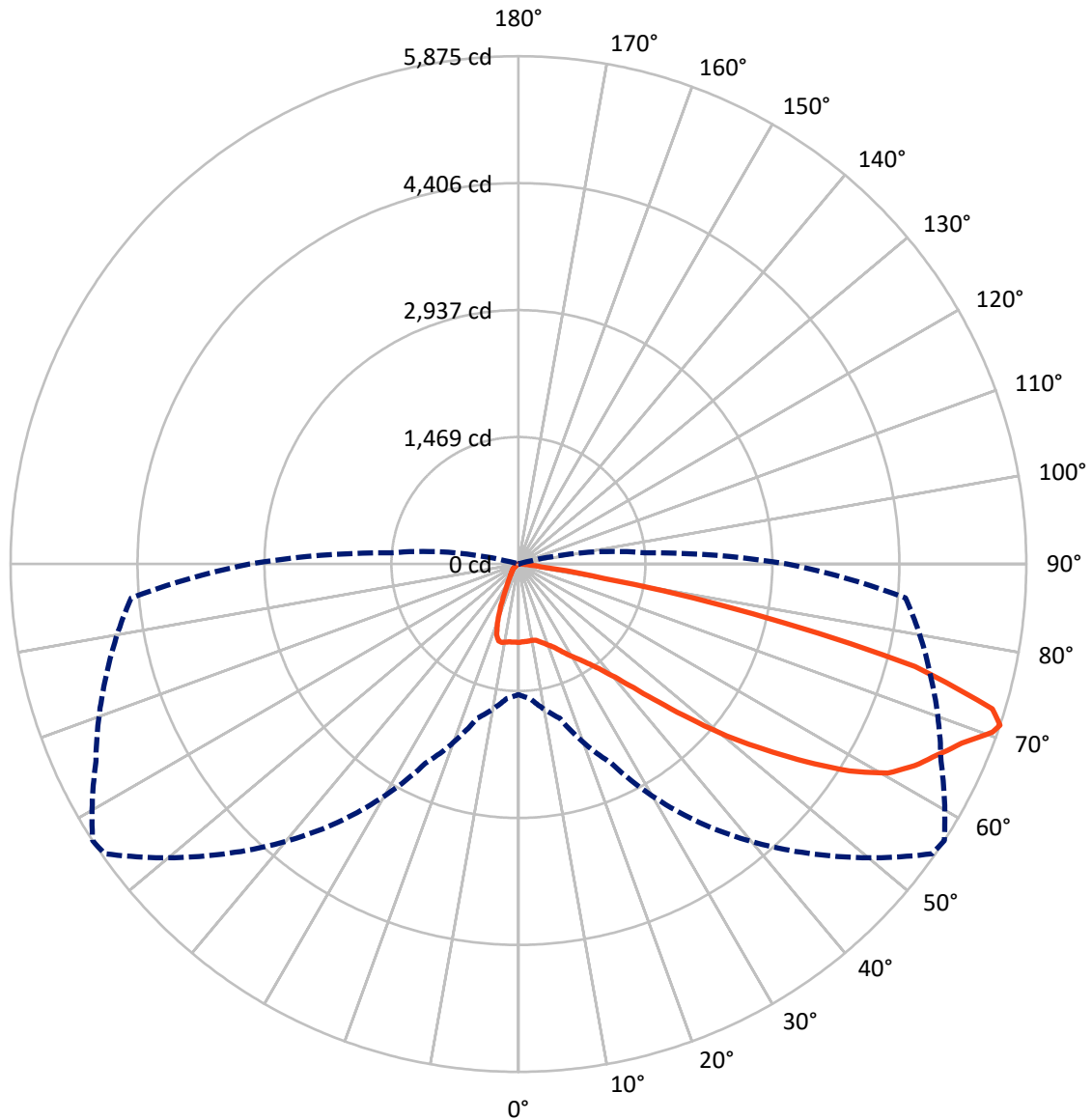


Based on 10 foot mounting height. Maximum calculated value = 11.3 fc
 Type III - Medium - Semi-Cutoff

REPORT NUMBER: P265802

CATALOG NUMBER: ARCH-M-AF48-90-D-U-T3-7027-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical



REPORT NUMBER: P265802

CATALOG NUMBER: ARCH-M-AF48-90-D-U-T3-7027-HSS

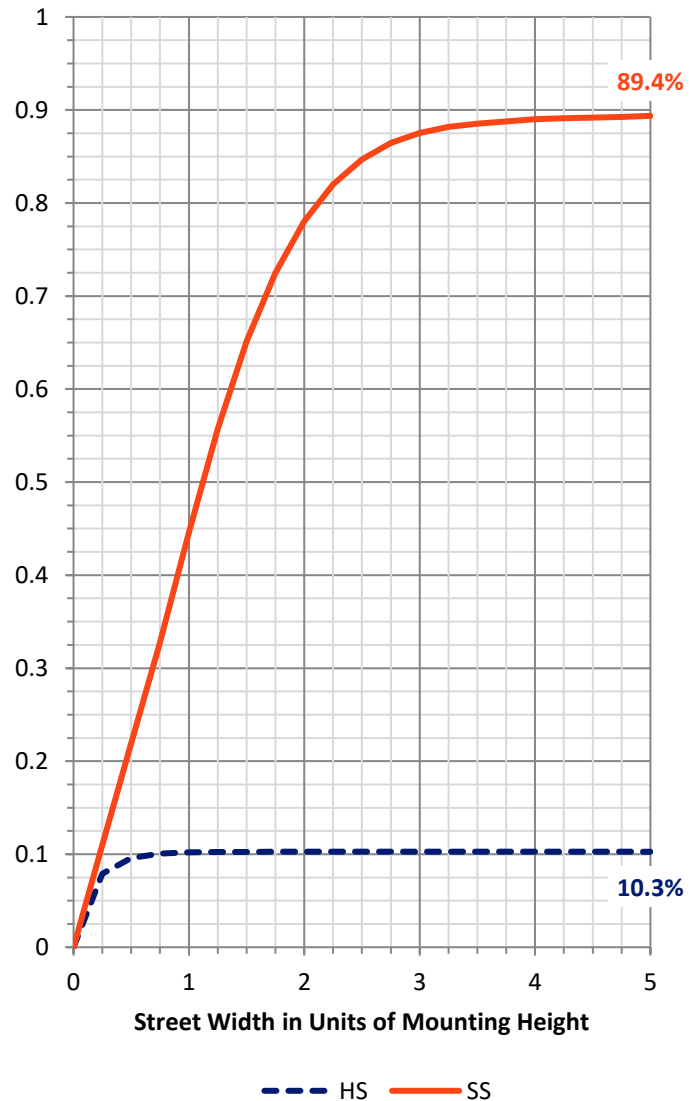
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	832.8	0.0	832.8
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	7203.6	0.0	7203.6
	% Fixture	89.6	0.0	89.6
Total	Lumens	8036.4	0.0	8036.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.3	1.1
10°-20°	228.1	2.8
20°-30°	355.8	4.4
30°-40°	601.3	7.5
40°-50°	1167.9	14.5
50°-60°	1961.3	24.4
60°-70°	2340.6	29.1
70°-80°	1233.5	15.3
80°-90°	62.7	0.8
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°	8036.4	100.0
0°-180°	8036.4	100.0



REPORT NUMBER: P265802

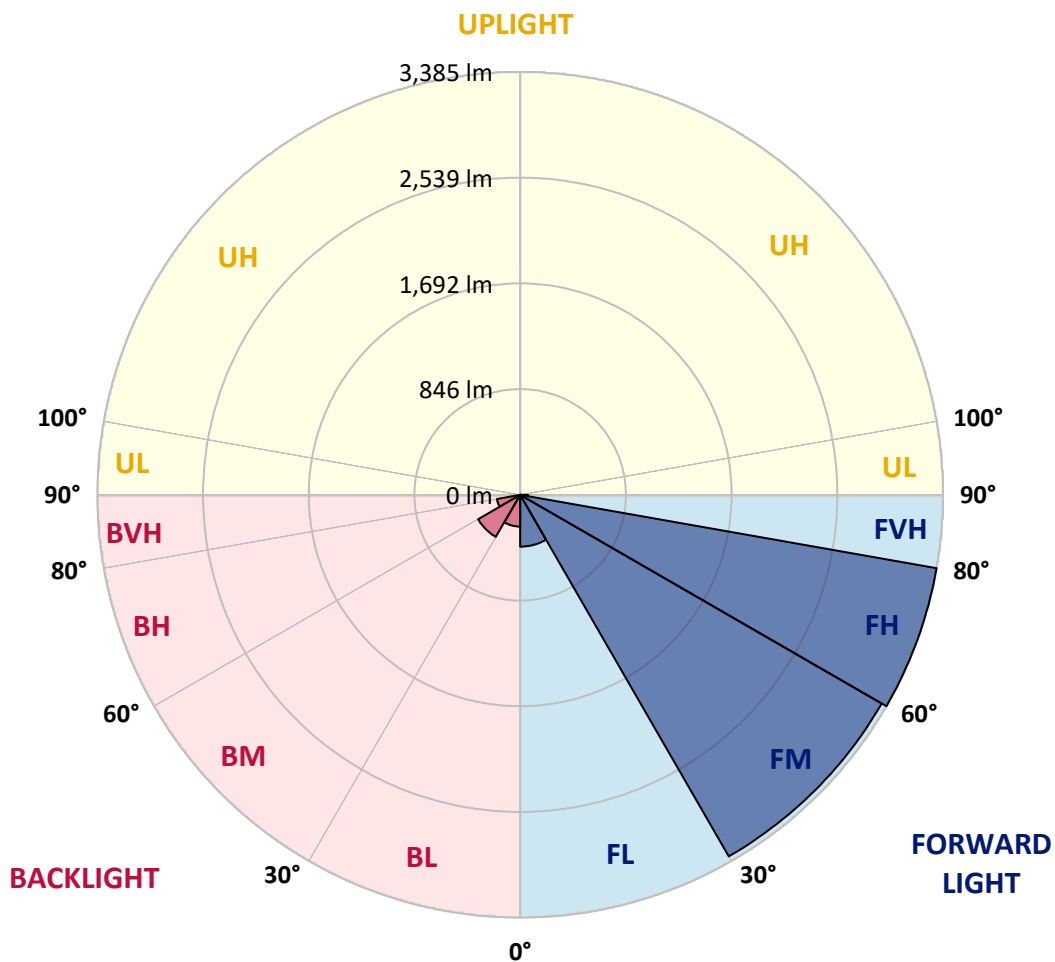
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	414.9	5.2			
FM	(30°-60°)	3341.6	41.6			
FH	(60°-80°)	3385.0	42.1			G2/5000
FVH	(80°-90°)	62.1	0.8			G1/100
BL	(0°-30°)	254.2	3.2	B1/500		
BM	(30°-60°)	388.9	4.8	B1/1000		
BH	(60°-80°)	189.1	2.4	B1/500		G1/500
BVH	(80°-90°)	0.6	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 III Medium





REPORT NUMBER: P265802

CATALOG NUMBER: ARCH-M-AF48-90-D-U-T3-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	908.2	908.2	908.2	908.2	908.2	908.2	908.2	908.2	908.2	908.2	908.2
2.5°	895.2	895.2	895.2	897.0	898.8	898.8	902.5	900.7	900.7	900.7	904.6
5°	870.7	872.7	874.5	878.3	885.8	891.4	900.7	900.7	902.5	906.4	908.2
7.5°	837.1	838.9	844.5	852.0	867.0	880.1	895.2	898.8	904.6	913.8	917.6
10°	816.5	820.2	827.7	837.1	853.8	870.7	889.5	895.2	912.0	928.8	938.2
12.5°	810.9	812.7	820.2	835.2	855.7	876.3	900.7	906.4	930.7	957.0	971.8
15°	820.2	822.0	825.8	842.7	867.0	893.3	925.1	932.6	962.5	992.4	1011.2
17.5°	837.1	837.1	840.9	855.7	882.0	912.0	953.2	964.4	998.1	1031.9	1052.5
20°	848.3	848.3	853.8	868.9	898.8	938.2	986.9	1001.9	1039.2	1076.8	1095.6
22.5°	859.6	861.5	867.0	883.9	917.6	971.8	1028.1	1043.0	1086.1	1125.4	1144.3
25°	891.4	889.5	891.4	906.4	945.6	1013.1	1084.3	1102.9	1147.9	1191.1	1200.3
27.5°	979.4	975.6	951.3	942.0	971.8	1056.1	1155.4	1174.2	1226.5	1269.7	1269.7
30°	1181.6	1174.2	1114.2	1037.5	1013.1	1095.6	1222.9	1249.1	1316.5	1353.9	1342.6
32.5°	1438.1	1421.4	1344.6	1213.5	1116.1	1147.9	1294.0	1323.9	1410.1	1441.9	1417.5
35°	1719.0	1717.2	1621.7	1453.2	1314.6	1256.5	1385.7	1421.4	1530.0	1558.0	1518.8
37.5°	2016.9	2024.3	1960.7	1728.5	1565.6	1434.5	1507.4	1548.7	1681.6	1715.4	1677.9
40°	2348.3	2346.5	2322.1	2046.8	1867.0	1687.2	1683.6	1721.0	1881.9	1934.4	1881.9
42.5°	2767.8	2764.1	2676.1	2428.7	2232.2	2016.9	1940.1	1953.2	2132.9	2219.2	2142.3
45°	3194.7	3168.5	3067.4	2853.9	2679.7	2425.1	2279.0	2279.0	2432.6	2550.6	2430.8
47.5°	3432.6	3406.4	3365.1	3247.2	3194.7	2910.1	2694.7	2668.5	2788.3	2908.3	2739.7
50°	3745.4	3745.4	3642.3	3597.4	3687.3	3487.0	3153.5	3127.3	3185.4	3280.9	3059.8
52.5°	3992.4	3947.5	3874.5	3913.8	4170.4	4078.7	3612.4	3561.8	3606.8	3631.0	3338.9
55°	4095.5	4052.4	4046.8	4191.0	4588.0	4460.7	4082.3	4037.4	4033.7	3913.8	3582.4
57.5°	4116.0	4078.7	4149.8	4402.7	4994.3	4773.4	4550.5	4516.8	4411.9	4112.4	3831.5
60°	3941.9	3960.6	4132.9	4518.7	5234.1	5044.9	4945.7	4910.0	4668.5	4280.9	4108.6
62.5°	3584.2	3629.2	3951.3	4530.0	5146.0	5155.5	5164.7	5140.5	4866.9	4434.5	4387.6
65°	3161.0	3174.2	3561.8	4374.4	4992.5	5121.6	5325.8	5324.0	5018.7	4606.7	4702.2
67.5°	2604.8	2627.4	2962.5	3850.1	4685.4	5106.7	5537.4	5531.9	5190.9	4803.3	4889.5
70°	1938.3	1966.3	2237.8	2994.4	4000.0	4919.5	5814.5	5818.3	5372.7	4953.2	4760.3
71°	1511.2	1561.9	1846.5	2543.0	3649.8	4730.3	5840.8	5874.5	5393.2	4932.6	4494.3
72.5°	741.6	801.5	1159.2	1790.2	3003.8	4307.1	5668.5	5734.1	5264.0	4675.9	3842.7
75°	192.9	204.2	346.4	732.2	1610.5	2853.9	4571.1	4737.8	4303.3	3560.0	2348.3
77.5°	121.7	125.5	163.0	284.7	603.0	1084.3	2685.4	2767.8	2458.8	1803.3	827.7
80°	86.1	88.0	102.9	183.6	352.0	316.5	966.2	1001.9	889.5	477.4	148.0
82.5°	52.5	52.5	74.9	117.9	217.2	172.2	254.7	271.6	239.7	132.9	48.7
85°	30.0	31.8	46.8	80.5	102.9	84.4	95.5	101.1	102.9	88.0	20.7
87.5°	24.3	26.2	41.2	67.5	56.1	41.2	41.2	43.1	44.9	52.5	9.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P265802

CATALOG NUMBER: ARCH-M-AF48-90-D-U-T3-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	908.2	908.2	908.2	908.2	908.2	908.2	908.2	908.2	908.2	908.2	908.2
2.5°	904.6	904.6	906.4	904.6	904.6	904.6	906.4	906.4	906.4	910.2	912.0
5°	908.2	908.2	908.2	906.4	904.6	904.6	908.2	910.2	910.2	915.7	915.7
7.5°	917.6	917.6	913.8	910.2	906.4	900.7	902.5	904.6	902.5	904.6	904.6
10°	938.2	938.2	932.6	925.1	913.8	897.0	874.5	846.5	820.2	810.9	807.0
12.5°	971.8	970.0	958.9	945.6	921.3	863.4	779.0	679.7	597.4	574.8	567.4
15°	1009.3	1005.7	992.4	970.0	904.6	751.0	574.8	447.5	368.9	350.2	346.4
17.5°	1048.7	1043.0	1024.3	979.4	827.7	558.0	370.8	280.9	237.8	234.1	236.0
20°	1089.9	1082.4	1056.1	960.6	668.5	372.6	239.7	217.2	213.4	213.4	215.4
22.5°	1136.6	1127.4	1091.7	893.3	486.9	247.3	206.0	204.2	202.3	200.4	200.4
25°	1191.1	1179.7	1125.4	771.6	335.2	202.3	196.5	191.0	187.2	183.6	181.6
27.5°	1256.5	1241.5	1151.6	621.6	230.3	189.2	185.4	176.0	168.5	161.1	161.1
30°	1322.0	1303.4	1144.3	468.1	187.2	176.0	168.5	157.4	146.1	138.6	136.7
32.5°	1391.4	1372.6	1095.6	314.5	170.4	161.1	151.6	134.8	121.7	112.4	110.5
35°	1494.4	1479.4	1000.1	207.9	153.6	142.3	129.3	112.4	95.5	86.1	84.4
37.5°	1647.9	1629.2	882.0	159.2	134.8	117.9	106.8	88.0	71.1	61.9	59.9
40°	1853.9	1797.8	741.6	140.4	117.9	97.3	82.5	63.7	50.6	44.9	44.9
42.5°	2093.6	1960.7	589.8	127.3	104.8	80.5	59.9	43.1	35.7	33.6	33.6
45°	2348.3	2112.4	438.3	117.9	91.7	63.7	43.1	30.0	26.2	24.3	24.3
47.5°	2610.5	2235.9	305.2	106.8	76.7	48.7	30.0	22.5	18.8	16.9	16.9
50°	2855.8	2316.5	215.4	95.5	65.5	35.7	22.5	16.9	13.1	13.1	13.1
52.5°	3026.2	2309.0	155.4	82.5	50.6	24.3	15.0	11.1	11.1	11.1	11.1
55°	3176.0	2280.8	121.7	71.1	39.3	16.9	11.1	9.3	9.3	7.5	7.5
57.5°	3303.3	2235.9	102.9	58.0	28.0	13.1	7.5	7.5	5.6	5.6	5.6
60°	3411.9	2179.7	86.1	48.7	18.8	9.3	5.6	3.8	3.8	1.8	3.8
62.5°	3560.0	2144.2	74.9	37.5	13.1	5.6	3.8	1.8	1.8	0.0	0.0
65°	3668.5	2076.7	63.7	26.2	7.5	3.8	1.8	1.8	0.0	0.0	0.0
67.5°	3672.2	1955.0	46.8	15.0	5.6	3.8	1.8	0.0	0.0	0.0	0.0
70°	3376.4	1666.6	30.0	7.5	3.8	1.8	1.8	0.0	0.0	0.0	0.0
71°	3104.8	1475.6	24.3	5.6	3.8	1.8	0.0	0.0	0.0	0.0	0.0
72.5°	2558.1	1084.3	18.8	5.6	1.8	1.8	0.0	0.0	0.0	0.0	0.0
75°	1410.1	393.3	9.3	3.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	451.3	119.8	5.6	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	76.7	18.8	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	26.2	7.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.5	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.8	1.8	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)