

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: P265782

Luminaire Tested: **ARCH-M-AF48-70-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265782
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-70-D-U-T2U-7027-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 470mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6014.5 lumens
Efficiency: N/A
Efficacy: 82.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 73
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

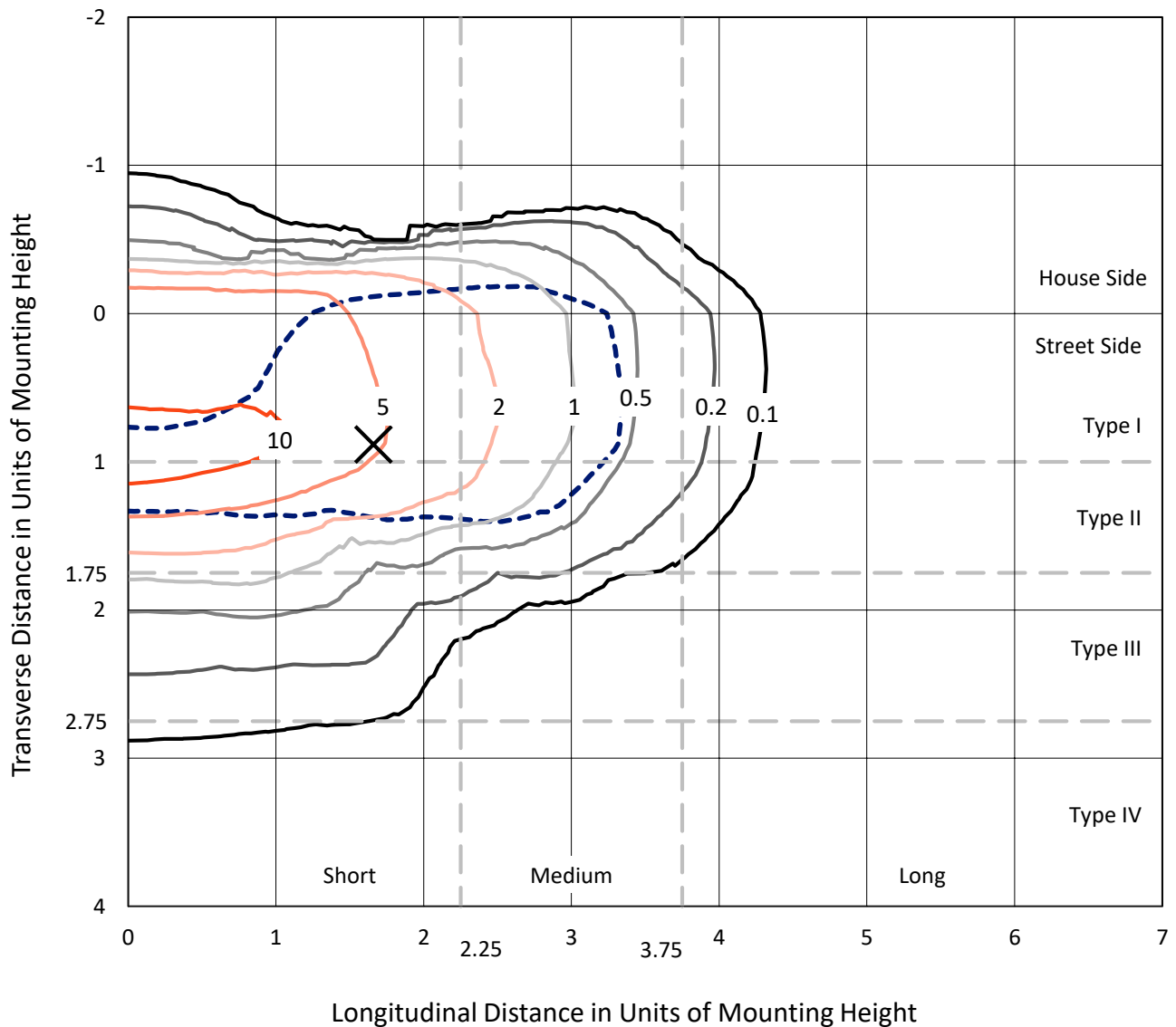


REPORT NUMBER: P265782

CATALOG NUMBER: ARCH-M-AF48-70-D-U-T2U-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

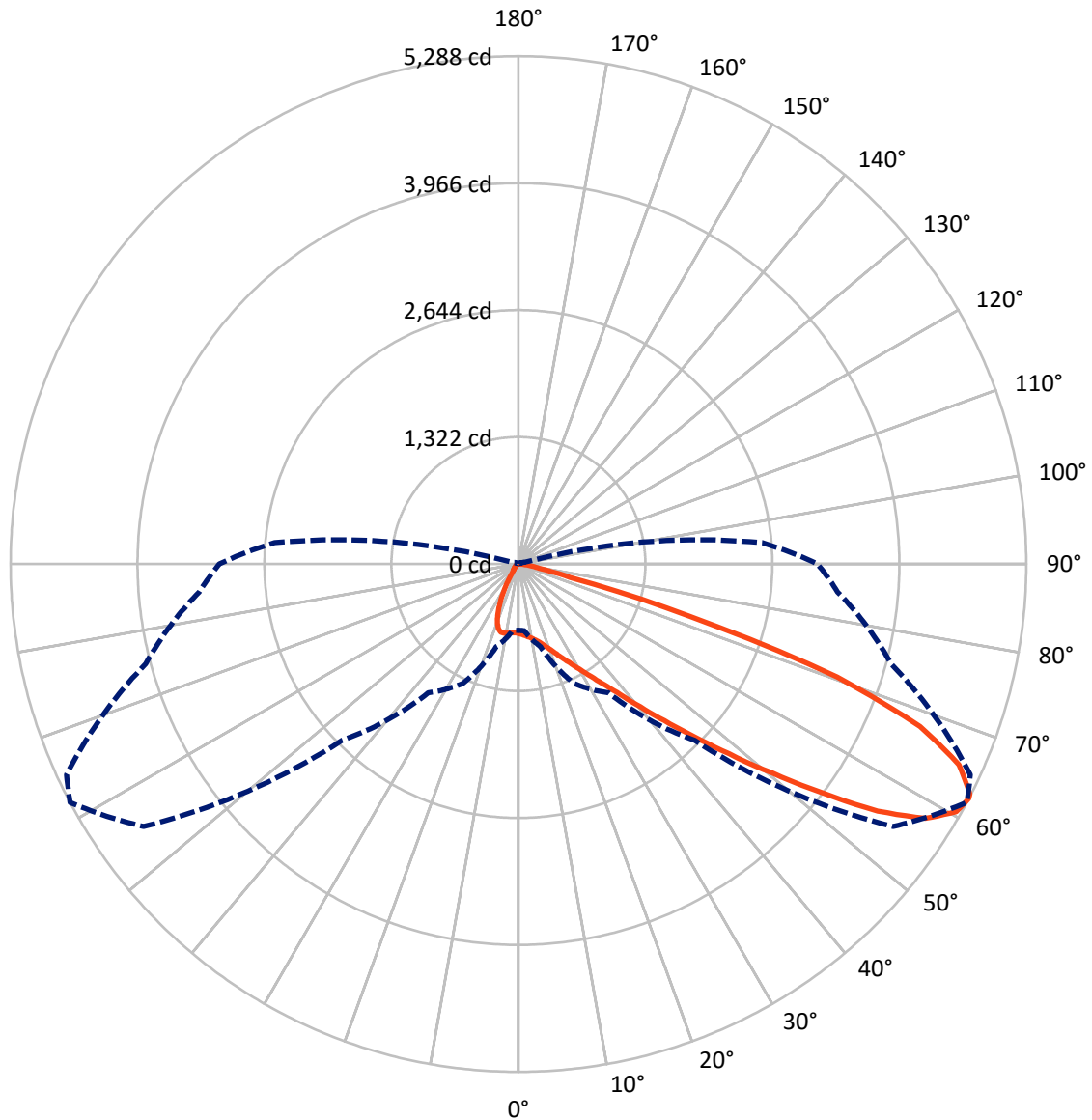


Based on 10 foot mounting height. Maximum calculated value = 13.8 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P265782

CATALOG NUMBER: ARCH-M-AF48-70-D-U-T2U-7027-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

REPORT NUMBER: P265782

CATALOG NUMBER: ARCH-M-AF48-70-D-U-T2U-7027-HSS

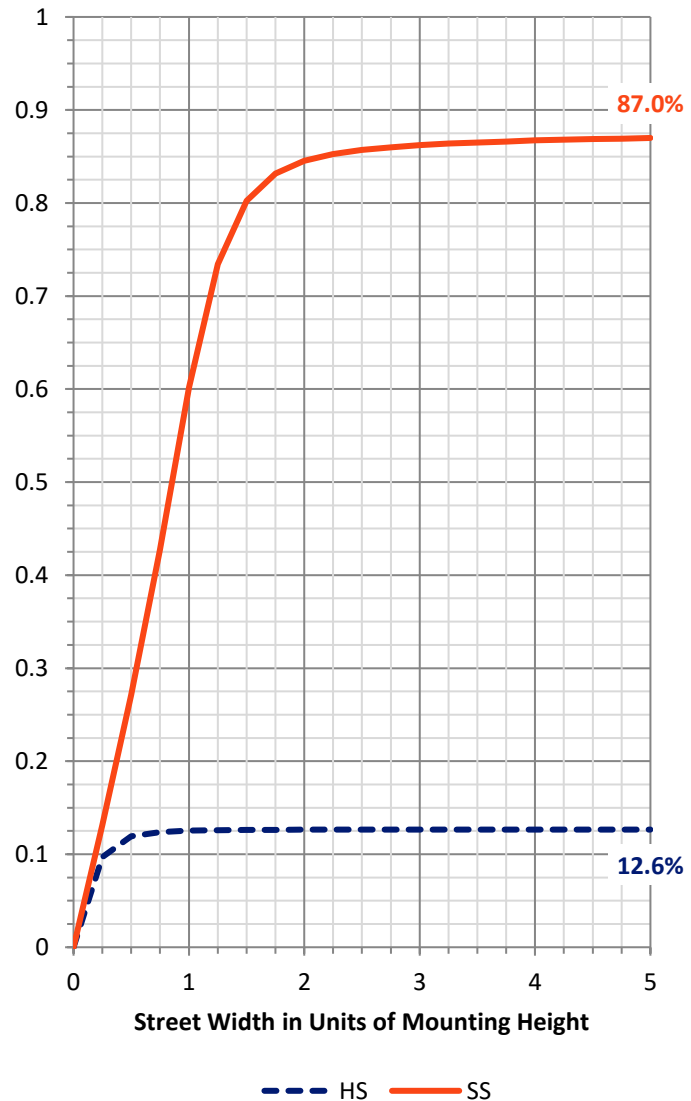
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	769.0	0.0	769.0
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	5245.5	0.0	5245.5
	% Fixture	87.2	0.0	87.2
Total	Lumens	6014.5	0.0	6014.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.7	1.2
10°-20°	194.7	3.2
20°-30°	327.0	5.4
30°-40°	626.8	10.4
40°-50°	1280.3	21.3
50°-60°	1694.3	28.2
60°-70°	1316.2	21.9
70°-80°	475.1	7.9
80°-90°	30.3	0.5
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°	6014.5	100.0
0°-180°	6014.5	100.0

Coefficient of Utilization



REPORT NUMBER: P265782

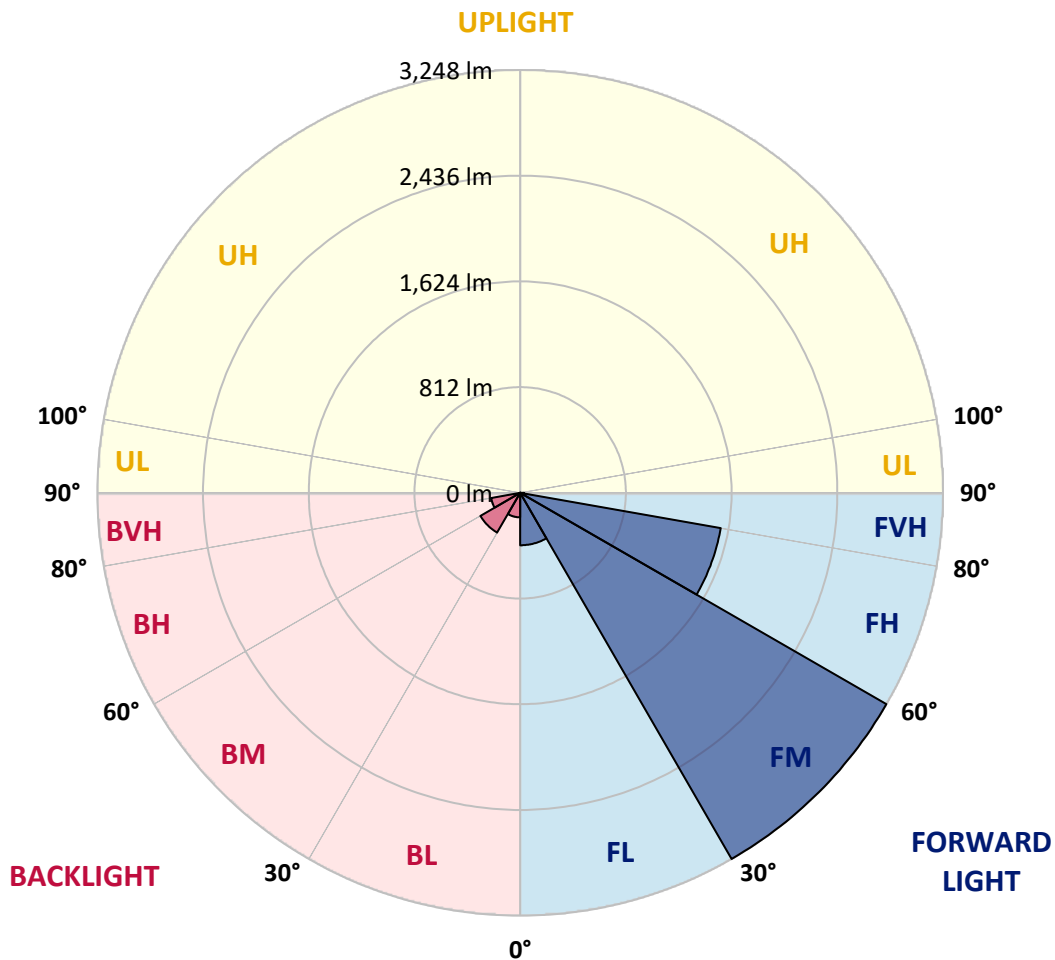
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	403.2	6.7			
FM	(30°-60°)	3248.5	54.0			
FH	(60°-80°)	1564.8	26.0			G1/1800
FVH	(80°-90°)	29.0	0.5			G1/100
BL	(0°-30°)	188.2	3.1	B1/500		
BM	(30°-60°)	353.0	5.9	B1/1000		
BH	(60°-80°)	226.4	3.8	B1/500		G1/500
BVH	(80°-90°)	1.3	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-G1

Type II Short





REPORT NUMBER: P265782

CATALOG NUMBER: ARCH-M-AF48-70-D-U-T2U-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	724.6	724.6	724.6	724.6	724.6	724.6	724.6	724.6	724.6	724.6	724.6
2.5°	743.7	742.3	740.8	739.3	739.3	737.9	736.3	733.3	730.4	727.4	726.0
5°	757.0	755.6	754.0	755.6	754.0	754.0	752.6	749.6	746.8	742.3	737.9
7.5°	767.4	766.0	764.5	766.0	767.4	768.9	770.3	767.4	766.0	760.1	755.6
10°	780.6	779.2	777.8	780.6	780.6	788.2	789.6	788.2	786.6	782.2	774.8
12.5°	799.9	801.4	801.4	804.3	807.3	816.2	819.2	814.8	814.8	808.8	799.9
15°	835.5	835.5	835.5	838.4	839.8	851.8	854.6	850.2	853.2	842.8	833.9
17.5°	869.4	870.8	874.0	879.8	879.8	890.1	896.1	896.1	902.0	888.7	876.8
20°	903.4	905.0	909.4	922.6	922.6	935.9	946.4	950.8	956.7	943.4	922.6
22.5°	940.4	940.4	947.8	968.6	964.2	990.7	1010.0	1017.3	1023.2	1005.5	973.0
25°	996.6	990.7	996.6	1015.9	1012.8	1049.8	1085.3	1092.7	1100.2	1079.5	1030.5
27.5°	1103.1	1094.1	1073.5	1074.9	1074.9	1117.9	1168.2	1178.4	1182.9	1165.1	1104.6
30°	1315.9	1315.9	1239.1	1187.3	1153.3	1191.8	1262.7	1280.5	1286.5	1259.9	1180.0
32.5°	1687.0	1687.0	1545.2	1413.6	1284.9	1284.9	1366.2	1398.8	1404.7	1373.7	1280.5
35°	2160.2	2157.3	1944.4	1764.0	1512.7	1418.1	1487.6	1542.2	1559.9	1518.6	1410.6
37.5°	2663.0	2643.8	2414.6	2207.6	1863.1	1631.0	1651.7	1724.0	1740.3	1706.3	1579.2
40°	3071.1	3048.9	2864.1	2691.1	2315.6	1971.1	1888.1	1954.7	1973.9	1926.7	1780.4
42.5°	3440.8	3386.0	3259.0	3134.6	2835.9	2559.5	2203.2	2229.8	2250.4	2200.2	2006.5
45°	3708.5	3624.1	3559.1	3520.5	3362.4	3205.6	2611.3	2558.1	2565.4	2503.2	2253.4
47.5°	3715.7	3656.6	3662.6	3763.1	3828.1	3822.3	3142.1	2952.8	2924.7	2821.2	2516.6
50°	3360.9	3395.0	3502.9	3789.7	4141.6	4354.5	3773.5	3420.0	3335.8	3149.5	2778.4
52.5°	2769.5	2822.7	3025.3	3508.8	4187.4	4705.1	4428.5	3953.8	3803.1	3474.7	2979.4
55°	2169.1	2172.1	2385.0	2877.5	3881.3	4768.6	4951.9	4540.8	4310.2	3721.7	3112.4
57.5°	1491.9	1573.2	1843.9	2175.1	3190.9	4452.1	5148.5	4996.3	4699.0	3874.0	3205.6
60°	977.4	981.8	1296.8	1679.7	2172.1	3622.7	5028.8	5237.3	5014.0	3964.2	3269.2
62°	689.0	696.5	891.6	1372.3	1636.8	2596.6	4764.2	5287.6	5191.5	4017.4	3335.8
62.5°	638.8	644.7	808.8	1295.3	1537.8	2328.9	4669.5	5275.7	5218.1	4035.1	3359.4
65°	468.7	468.7	529.3	890.1	1126.7	1258.3	3956.9	5040.6	5182.6	4177.1	3448.1
67.5°	362.2	365.3	385.9	548.5	850.2	763.0	2525.4	4511.3	4812.8	4387.1	3498.4
70°	312.0	310.5	325.2	363.8	613.6	507.2	1111.9	3520.5	4030.8	4333.9	3452.5
72.5°	230.7	232.1	266.2	319.3	427.4	329.8	502.7	1869.0	2614.2	3392.0	2958.7
75°	148.0	149.4	187.7	251.3	307.6	216.0	289.9	557.5	1070.5	1880.8	1809.8
77.5°	99.1	102.0	122.7	176.0	269.1	134.6	181.8	233.6	322.3	705.3	649.1
80°	66.6	66.6	78.3	118.2	170.0	112.4	97.6	155.2	167.1	218.8	109.5
82.5°	44.3	44.3	51.7	78.3	110.9	100.5	59.2	84.4	97.6	109.5	38.4
85°	26.6	26.6	35.6	48.8	72.5	56.1	38.4	47.3	50.2	69.4	20.8
87.5°	16.3	14.8	23.6	34.0	38.4	34.0	25.2	25.2	26.6	38.4	10.3
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: P265782

CATALOG NUMBER: ARCH-M-AF48-70-D-U-T2U-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	724.6	724.6	724.6	724.6	724.6	724.6	724.6	724.6	724.6	724.6	724.6
2.5°	723.0	721.6	720.1	717.1	712.6	709.8	706.7	703.8	700.9	700.9	705.3
5°	736.3	731.8	726.0	720.1	711.2	705.3	700.9	695.0	692.1	692.1	693.5
7.5°	752.6	748.2	737.9	727.4	714.2	703.8	693.5	680.1	669.9	665.4	669.9
10°	770.3	764.5	749.6	733.3	718.6	692.1	658.0	616.5	581.2	564.9	572.2
12.5°	792.6	785.2	767.4	745.2	711.2	646.2	561.9	465.9	405.1	377.1	382.9
15°	825.1	814.8	789.6	755.6	680.1	539.7	402.3	291.3	235.0	211.5	214.3
17.5°	863.5	850.2	816.2	752.6	600.2	388.8	239.6	170.0	146.3	140.4	140.4
20°	905.0	887.2	842.8	730.4	479.1	244.0	149.4	130.2	121.2	116.8	116.8
22.5°	947.8	924.1	865.0	678.7	341.5	152.4	122.7	109.5	99.1	94.6	94.6
25°	999.5	968.6	887.2	588.5	217.4	122.7	105.0	91.6	81.3	75.4	76.8
27.5°	1060.2	1020.3	906.4	476.1	140.4	106.4	87.2	73.9	65.0	62.2	62.2
30°	1123.8	1076.4	910.8	356.4	113.8	91.6	72.5	60.6	54.6	51.7	51.7
32.5°	1210.9	1148.9	897.5	236.6	96.1	76.8	60.6	50.2	45.9	44.3	44.3
35°	1326.3	1243.6	866.4	146.3	81.3	63.6	50.2	44.3	40.0	38.4	38.4
37.5°	1472.7	1375.1	811.8	100.5	69.4	51.7	42.8	38.4	35.6	34.0	34.0
40°	1668.0	1534.8	740.8	87.2	59.2	44.3	37.0	34.0	31.0	31.0	31.0
42.5°	1874.9	1728.5	649.1	76.8	50.2	38.4	32.5	29.6	28.0	26.6	26.6
45°	2101.1	1926.7	535.3	68.0	42.8	34.0	29.6	25.2	23.6	23.6	23.6
47.5°	2325.9	2130.7	411.1	59.2	37.0	29.6	25.2	22.2	20.8	19.3	19.3
50°	2556.5	2315.6	301.7	51.7	32.5	26.6	22.2	19.3	16.3	14.8	14.8
52.5°	2723.7	2426.4	220.4	44.3	28.0	22.2	17.7	14.8	11.9	10.3	10.3
55°	2846.4	2494.5	161.2	37.0	25.2	19.3	14.8	11.9	8.9	8.9	7.4
57.5°	2942.5	2527.0	121.2	32.5	22.2	16.3	11.9	8.9	7.4	5.8	5.8
60°	3016.4	2528.5	90.2	26.6	19.3	13.4	8.9	5.8	4.4	4.4	4.4
62°	3114.0	2547.7	73.9	22.2	17.7	11.9	7.4	4.4	3.0	1.4	1.4
62.5°	3142.1	2555.0	71.0	22.2	16.3	10.3	5.8	4.4	3.0	1.4	1.4
65°	3272.2	2568.3	54.6	17.7	13.4	8.9	4.4	3.0	0.0	0.0	0.0
67.5°	3390.6	2547.7	40.0	13.4	10.3	5.8	4.4	1.4	0.0	0.0	0.0
70°	3378.6	2405.8	28.0	8.9	7.4	4.4	3.0	0.0	0.0	0.0	0.0
72.5°	2784.2	1800.9	19.3	7.4	4.4	3.0	1.4	0.0	0.0	0.0	0.0
75°	1681.2	788.2	13.4	4.4	4.4	3.0	1.4	0.0	0.0	0.0	0.0
77.5°	551.5	285.4	8.9	3.0	3.0	1.4	1.4	0.0	0.0	0.0	0.0
80°	90.2	47.3	4.4	3.0	3.0	1.4	1.4	0.0	0.0	0.0	0.0
82.5°	28.0	11.9	3.0	3.0	1.4	1.4	0.0	0.0	0.0	0.0	0.0
85°	10.3	4.4	3.0	3.0	1.4	1.4	0.0	0.0	0.0	0.0	0.0
87.5°	4.4	3.0	3.0	3.0	1.4	1.4	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)