

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: P231233

Luminaire Tested: **ARCH-M-AF48-60-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231233
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-AF48-60-D-U-T3-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 405mA 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: 6708.5 lumens
Efficiency: N/A
Efficacy: 106.5 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

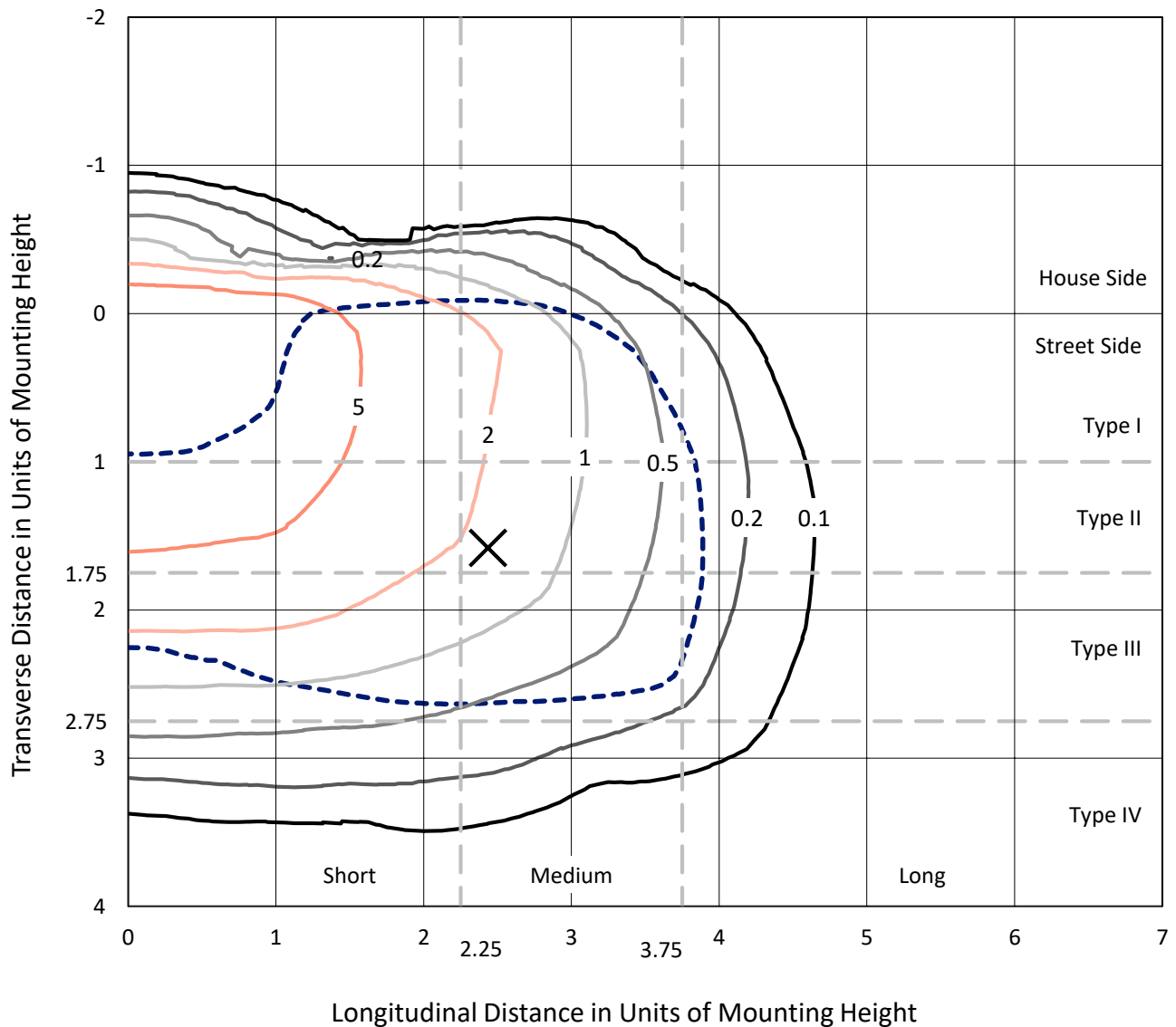
Input Watts (W): 63
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

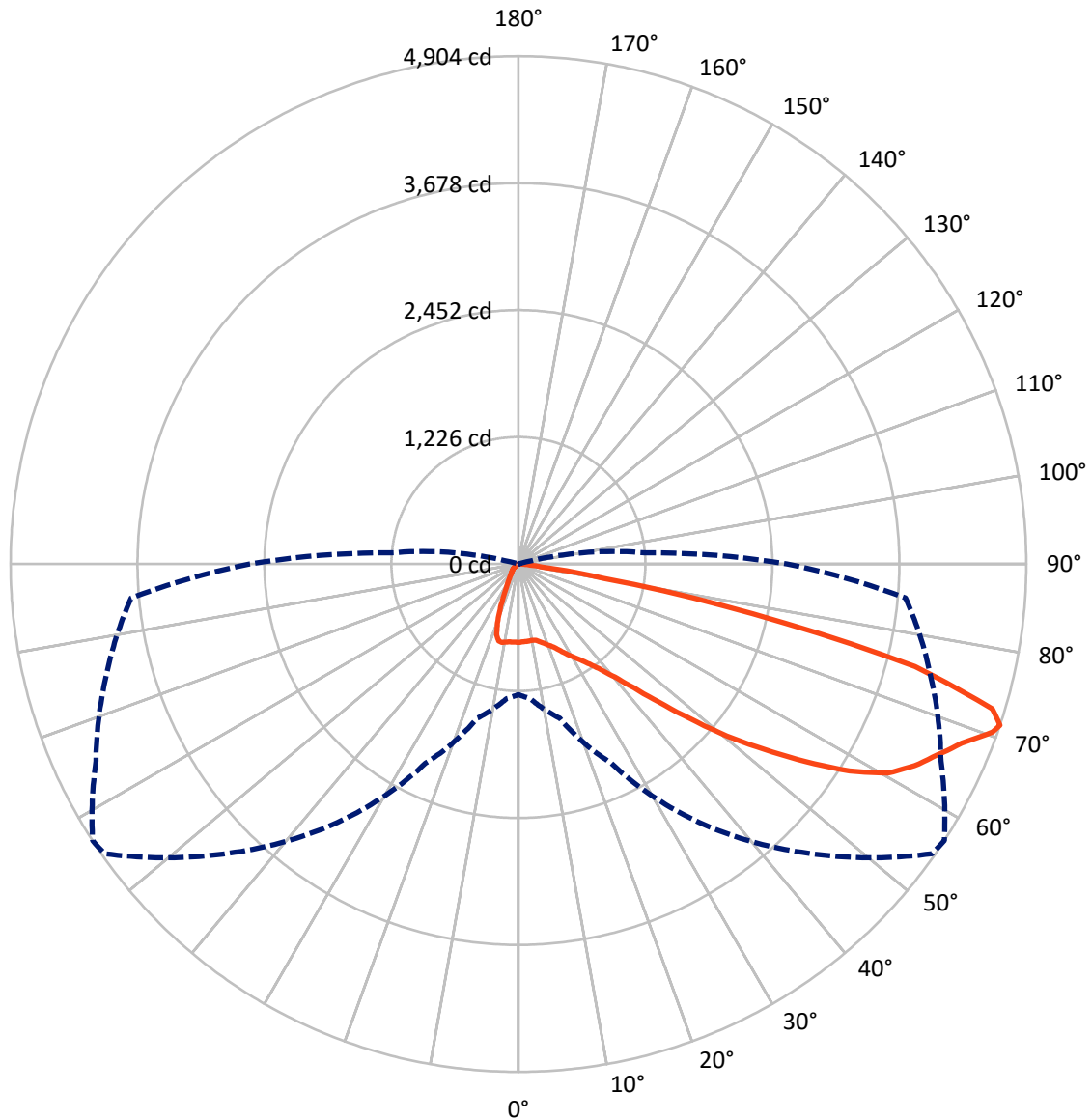


Based on 10 foot mounting height. Maximum calculated value = 9.4 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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



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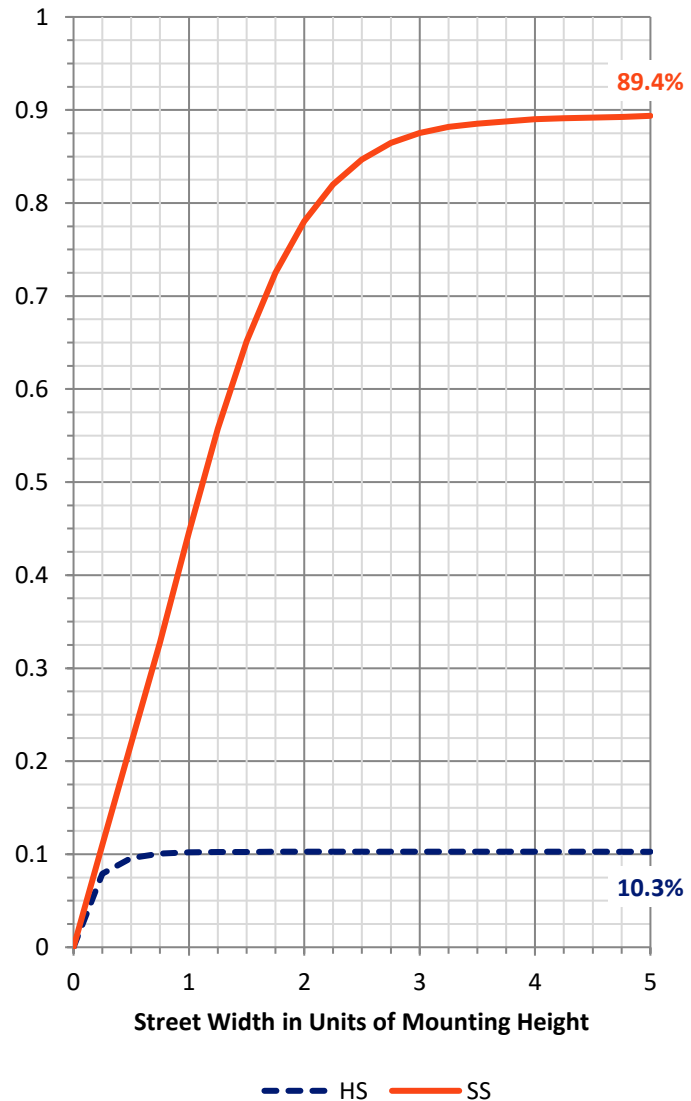
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	695.2	0.0	695.2
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	6013.3	0.0	6013.3
	% Fixture	89.6	0.0	89.6
Total	Lumens	6708.5	0.0	6708.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.2	1.1
10°-20°	190.4	2.8
20°-30°	297.0	4.4
30°-40°	502.0	7.5
40°-50°	974.9	14.5
50°-60°	1637.2	24.4
60°-70°	1953.9	29.1
70°-80°	1029.7	15.3
80°-90°	52.3	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°	6708.5	100.0
0°-180°	6708.5	100.0

Coefficient of Utilization



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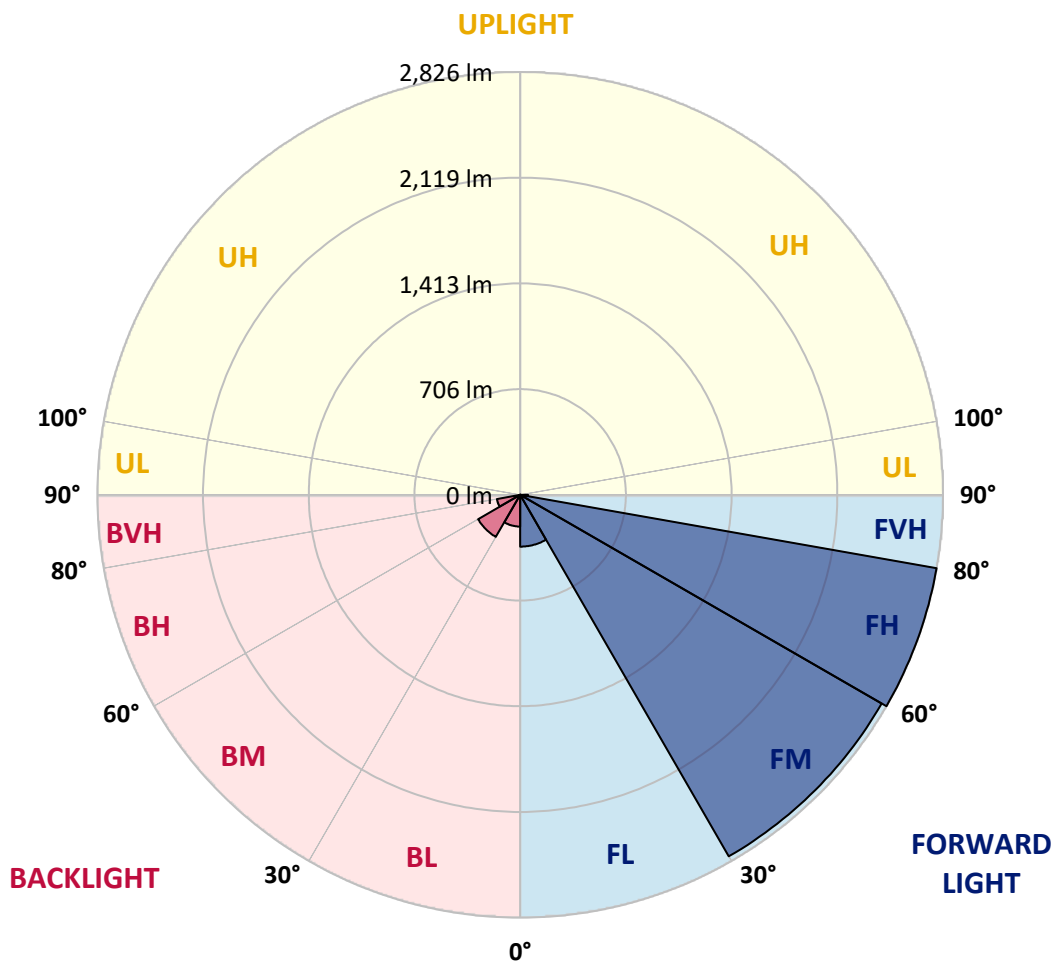
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	346.3	5.2			
FM	(30°-60°)	2789.5	41.6			
FH	(60°-80°)	2825.7	42.1			G2/5000
FVH	(80°-90°)	51.8	0.8			G1/100
BL	(0°-30°)	212.2	3.2	B1/500		
BM	(30°-60°)	324.6	4.8	B1/1000		
BH	(60°-80°)	157.9	2.4	B1/500		G1/500
BVH	(80°-90°)	0.5	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	758.2	758.2	758.2	758.2	758.2	758.2	758.2	758.2	758.2	758.2	758.2
2.5°	747.3	747.3	747.3	748.8	750.3	750.3	753.5	751.9	751.9	751.9	755.0
5°	726.9	728.4	730.0	733.1	739.4	744.1	751.9	751.9	753.5	756.6	758.2
7.5°	698.8	700.3	705.0	711.3	723.7	734.7	747.3	750.3	755.0	762.8	766.0
10°	681.6	684.7	690.9	698.8	712.8	726.9	742.6	747.3	761.3	775.4	783.2
12.5°	676.9	678.4	684.7	697.2	714.4	731.6	751.9	756.6	776.9	798.8	811.3
15°	684.7	686.3	689.4	703.5	723.7	745.6	772.2	778.5	803.5	828.5	844.1
17.5°	698.8	698.8	701.8	714.4	736.3	761.3	795.7	805.1	833.2	861.3	878.5
20°	708.2	708.2	712.8	725.4	750.3	783.2	823.8	836.4	867.6	898.9	914.5
22.5°	717.5	719.0	723.7	737.9	766.0	811.3	858.3	870.7	906.6	939.5	955.1
25°	744.1	742.6	744.1	756.6	789.4	845.7	905.1	920.8	958.3	994.2	1002.0
27.5°	817.5	814.5	794.1	786.3	811.3	881.7	964.5	980.2	1023.9	1059.9	1059.9
30°	986.4	980.2	930.2	866.0	845.7	914.5	1020.8	1042.7	1099.0	1130.3	1120.8
32.5°	1200.5	1186.5	1122.4	1012.9	931.7	958.3	1080.2	1105.2	1177.1	1203.7	1183.3
35°	1435.0	1433.5	1353.8	1213.0	1097.4	1048.9	1156.8	1186.5	1277.2	1300.6	1267.7
37.5°	1683.6	1689.8	1636.7	1442.9	1306.8	1197.5	1258.4	1292.8	1403.8	1431.9	1400.6
40°	1960.3	1958.7	1938.4	1708.6	1558.6	1408.5	1405.3	1436.6	1571.0	1614.8	1571.0
42.5°	2310.4	2307.4	2233.8	2027.5	1863.4	1683.6	1619.5	1630.5	1780.5	1852.5	1788.3
45°	2666.8	2644.9	2560.5	2382.4	2237.0	2024.4	1902.5	1902.5	2030.7	2129.1	2029.0
47.5°	2865.4	2843.5	2809.1	2710.6	2666.8	2429.2	2249.5	2227.6	2327.6	2427.7	2287.0
50°	3126.4	3126.4	3040.5	3003.0	3078.0	2910.7	2632.5	2610.6	2659.1	2738.7	2554.3
52.5°	3332.8	3295.2	3234.3	3267.1	3481.3	3404.7	3015.5	2973.2	3010.7	3031.1	2787.2
55°	3418.8	3382.8	3378.1	3498.5	3829.9	3723.6	3407.9	3370.3	3367.1	3267.1	2990.5
57.5°	3436.0	3404.7	3464.1	3675.2	4169.1	3984.7	3798.6	3770.5	3682.9	3432.8	3198.4
60°	3290.6	3306.2	3450.0	3772.0	4369.2	4211.3	4128.4	4098.8	3897.1	3573.6	3429.7
62.5°	2992.0	3029.6	3298.4	3781.4	4295.8	4303.6	4311.3	4291.1	4062.9	3701.8	3662.7
65°	2638.7	2649.6	2973.2	3651.7	4167.6	4275.4	4445.8	4444.2	4189.4	3845.6	3925.3
67.5°	2174.5	2193.2	2473.0	3214.0	3911.2	4262.9	4622.4	4617.8	4333.2	4009.7	4081.6
70°	1617.9	1641.4	1868.0	2499.6	3339.0	4106.6	4853.8	4857.0	4484.9	4134.8	3973.8
71°	1261.5	1303.8	1541.4	2122.8	3046.8	3948.7	4875.7	4903.8	4502.1	4117.6	3751.8
72.5°	619.0	669.0	967.6	1494.4	2507.5	3595.4	4731.9	4786.6	4394.2	3903.4	3207.8
75°	161.0	170.4	289.2	611.2	1344.4	2382.4	3815.8	3954.9	3592.3	2971.7	1960.3
77.5°	101.6	104.8	136.0	237.6	503.4	905.1	2241.7	2310.4	2052.6	1505.4	690.9
80°	71.9	73.4	85.9	153.2	293.9	264.2	806.6	836.4	742.6	398.6	123.5
82.5°	43.8	43.8	62.5	98.5	181.4	143.8	212.6	226.7	200.1	111.0	40.6
85°	25.1	26.6	39.1	67.2	85.9	70.4	79.7	84.4	85.9	73.4	17.2
87.5°	20.4	21.9	34.4	56.3	46.9	34.4	34.4	35.9	37.5	43.8	7.8
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°	758.2	758.2	758.2	758.2	758.2	758.2	758.2	758.2	758.2	758.2	758.2
2.5°	755.0	755.0	756.6	755.0	755.0	755.0	756.6	756.6	756.6	759.7	761.3
5°	758.2	758.2	758.2	756.6	755.0	755.0	758.2	759.7	759.7	764.5	764.5
7.5°	766.0	766.0	762.8	759.7	756.6	751.9	753.5	755.0	753.5	755.0	755.0
10°	783.2	783.2	778.5	772.2	762.8	748.8	730.0	706.6	684.7	676.9	673.7
12.5°	811.3	809.8	800.4	789.4	769.2	720.7	650.3	567.4	498.7	479.9	473.6
15°	842.6	839.4	828.5	809.8	755.0	626.9	479.9	373.6	307.9	292.4	289.2
17.5°	875.4	870.7	855.1	817.5	690.9	465.9	309.5	234.5	198.6	195.4	196.9
20°	909.8	903.6	881.7	801.9	558.1	311.1	200.1	181.4	178.2	178.2	179.7
22.5°	948.9	941.0	911.3	745.6	406.4	206.3	172.0	170.4	168.8	167.3	167.3
25°	994.2	984.8	939.5	644.0	279.8	168.8	164.2	159.5	156.3	153.2	151.6
27.5°	1048.9	1036.5	961.4	518.9	192.3	157.8	154.8	146.9	140.7	134.4	134.4
30°	1103.7	1088.0	955.1	390.8	156.3	146.9	140.7	131.3	121.9	115.7	114.2
32.5°	1161.5	1145.8	914.5	262.6	142.3	134.4	126.6	112.5	101.6	93.8	92.3
35°	1247.5	1234.9	834.7	173.5	128.2	118.8	107.8	93.8	79.7	71.9	70.4
37.5°	1375.7	1360.0	736.3	132.9	112.5	98.5	89.1	73.4	59.4	51.6	50.0
40°	1547.6	1500.7	619.0	117.2	98.5	81.3	68.7	53.2	42.2	37.5	37.5
42.5°	1747.7	1636.7	492.4	106.3	87.6	67.2	50.0	35.9	29.7	28.1	28.1
45°	1960.3	1763.4	365.8	98.5	76.6	53.2	35.9	25.1	21.9	20.4	20.4
47.5°	2179.1	1866.5	254.8	89.1	64.1	40.6	25.1	18.7	15.7	14.1	14.1
50°	2383.9	1933.7	179.7	79.7	54.7	29.7	18.7	14.1	10.9	10.9	10.9
52.5°	2526.2	1927.4	129.7	68.7	42.2	20.4	12.5	9.4	9.4	9.4	9.4
55°	2651.2	1904.0	101.6	59.4	32.8	14.1	9.4	7.8	7.8	6.2	6.2
57.5°	2757.6	1866.5	85.9	48.5	23.4	10.9	6.2	6.2	4.7	4.7	4.7
60°	2848.2	1819.6	71.9	40.6	15.7	7.8	4.7	3.2	3.2	1.5	3.2
62.5°	2971.7	1789.9	62.5	31.3	10.9	4.7	3.2	1.5	1.5	0.0	0.0
65°	3062.3	1733.6	53.2	21.9	6.2	3.2	1.5	1.5	0.0	0.0	0.0
67.5°	3065.5	1632.0	39.1	12.5	4.7	3.2	1.5	0.0	0.0	0.0	0.0
70°	2818.5	1391.3	25.1	6.2	3.2	1.5	1.5	0.0	0.0	0.0	0.0
71°	2591.9	1231.8	20.4	4.7	3.2	1.5	0.0	0.0	0.0	0.0	0.0
72.5°	2135.4	905.1	15.7	4.7	1.5	1.5	0.0	0.0	0.0	0.0	0.0
75°	1177.1	328.3	7.8	3.2	1.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	376.8	100.0	4.7	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	64.1	15.7	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	21.9	6.2	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.2	1.5	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)