

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: P265953

Luminaire Tested: **ARCH-AF24-60-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265953  
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-AF24-60-D-U-T2U-7027-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 800mA LIGHT ENGINE 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: 4507 lumens  
Efficiency: N/A  
Efficacy: 70.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 64  
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

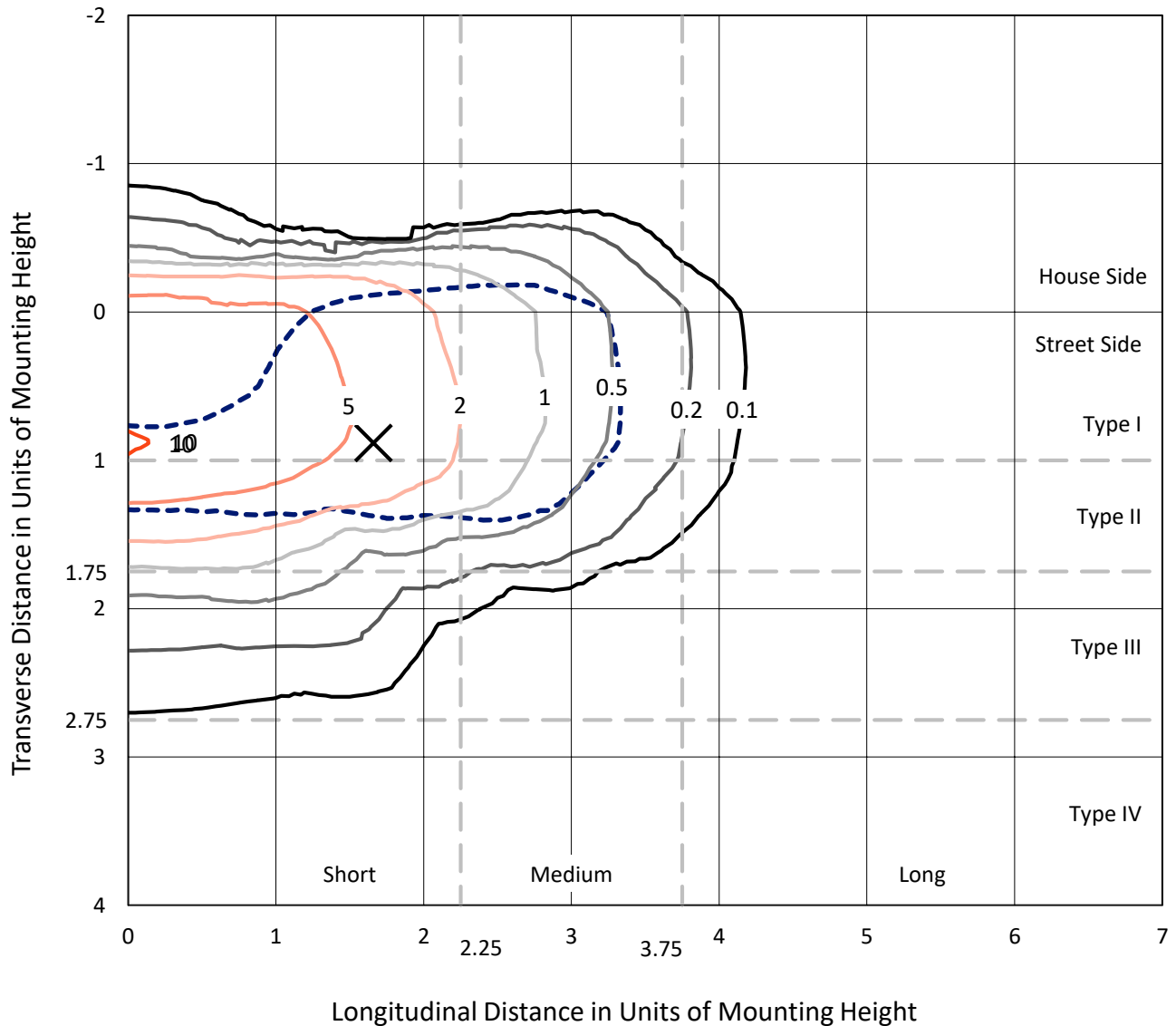


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### Iso-Footcandle Lines of Horizontal Illumination

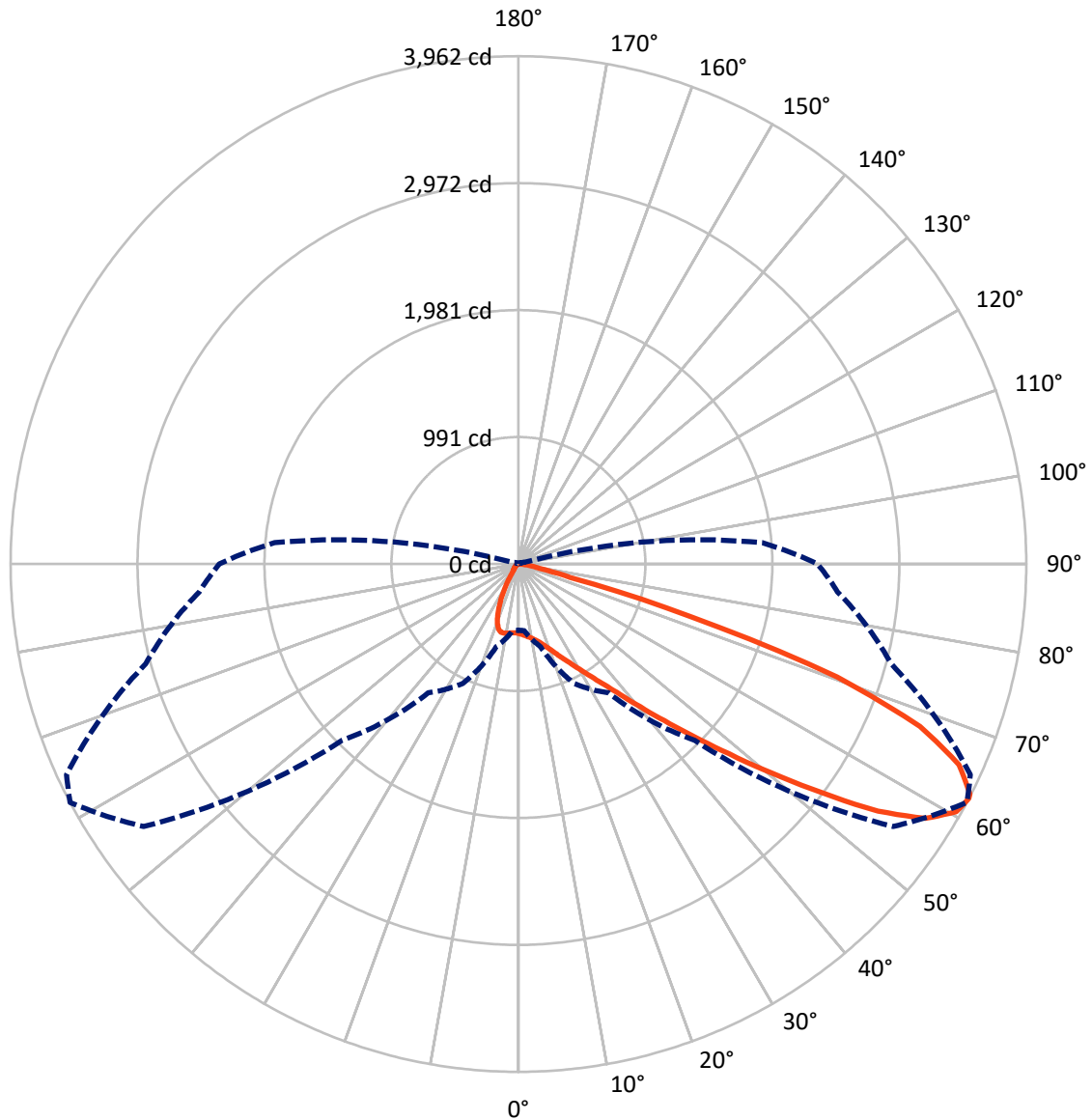
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.4 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



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

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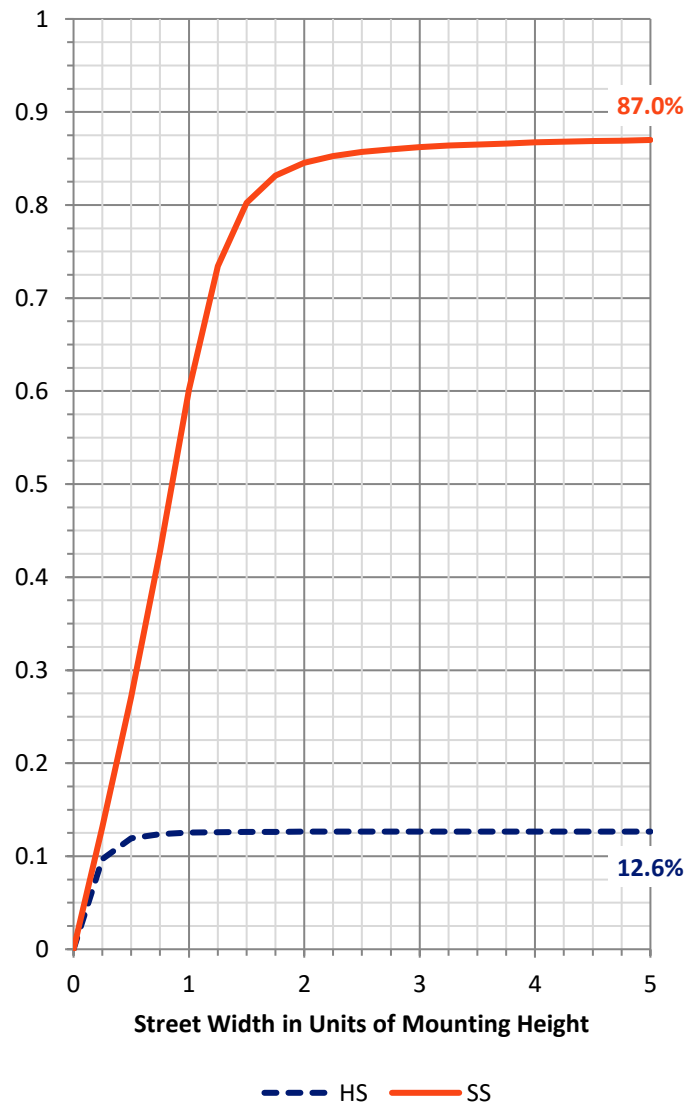
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	576.3	0.0	576.3
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	3930.7	0.0	3930.7
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	4507.0	0.0	4507.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.2	1.2
10°-20°	145.9	3.2
20°-30°	245.0	5.4
30°-40°	469.7	10.4
40°-50°	959.4	21.3
50°-60°	1269.6	28.2
60°-70°	986.3	21.9
70°-80°	356.0	7.9
80°-90°	22.7	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°	4507.0	100.0
0°-180°	4507.0	100.0



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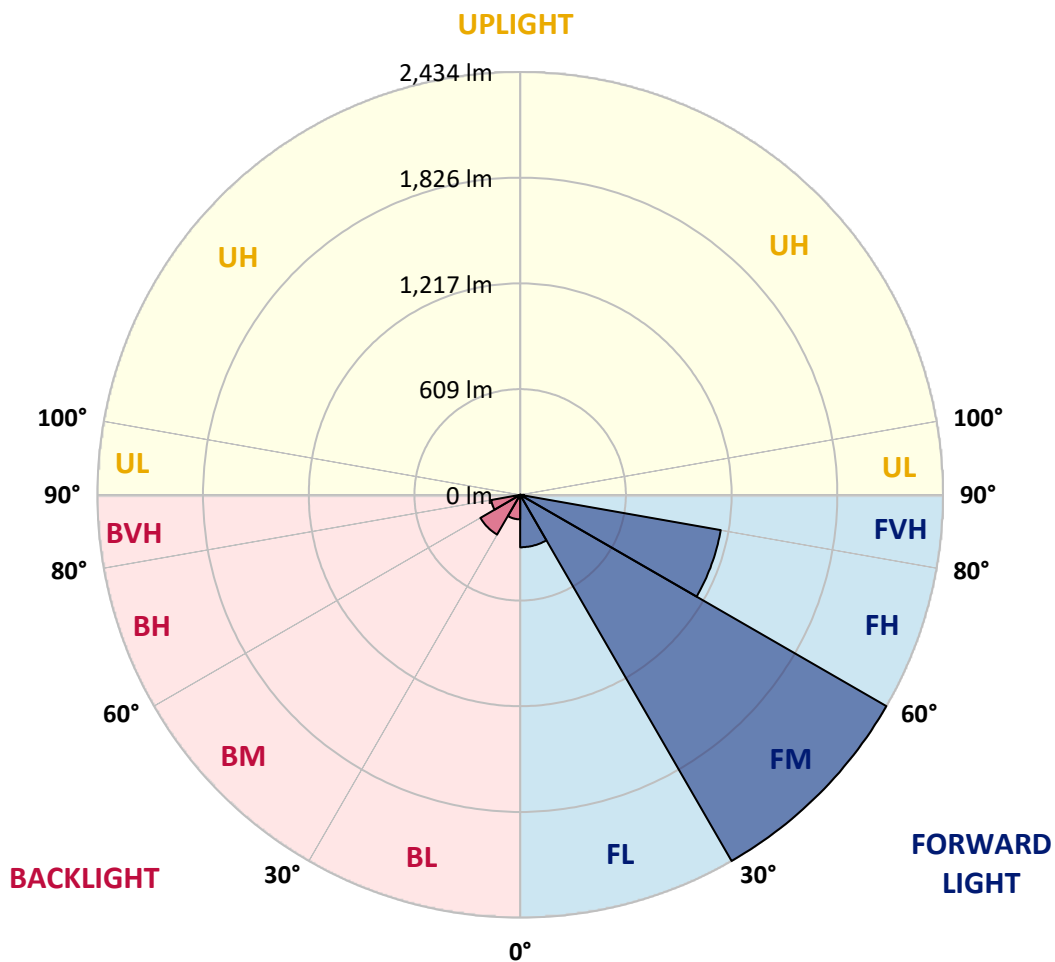
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	302.2	6.7			
FM	(30°-60°)	2434.2	54.0			
FH	(60°-80°)	1172.6	26.0			G1/1800
FVH	(80°-90°)	21.7	0.5			G1/100
BL	(0°-30°)	141.0	3.1	B1/500		
BM	(30°-60°)	264.5	5.9	B1/1000		
BH	(60°-80°)	169.7	3.8	B1/500		G1/500
BVH	(80°-90°)	1.0	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	542.9	542.9	542.9	542.9	542.9	542.9	542.9	542.9	542.9	542.9	542.9
2.5°	557.3	556.2	555.2	554.1	554.1	552.8	551.7	549.6	547.3	545.1	544.1
5°	567.3	566.2	565.0	566.2	565.0	565.0	564.0	561.8	559.6	556.2	552.8
7.5°	575.0	573.9	572.8	573.9	575.0	576.2	577.3	575.0	573.9	569.5	566.2
10°	585.1	583.9	582.8	585.1	585.1	590.5	591.7	590.5	589.5	586.1	580.6
12.5°	599.3	600.5	600.5	602.8	605.0	611.7	613.8	610.5	610.5	606.0	599.3
15°	625.9	625.9	625.9	628.3	629.4	638.2	640.4	637.1	639.4	631.6	625.0
17.5°	651.5	652.6	654.9	659.3	659.3	667.0	671.5	671.5	675.9	666.0	657.0
20°	677.1	678.1	681.5	691.3	691.3	701.3	709.1	712.4	716.8	706.8	691.3
22.5°	704.7	704.7	710.2	725.7	722.3	742.4	756.7	762.3	766.8	753.5	729.1
25°	746.9	742.4	746.9	761.3	759.0	786.6	813.2	818.9	824.4	808.8	772.4
27.5°	826.6	820.0	804.4	805.5	805.5	837.7	875.3	883.0	886.4	873.2	827.7
30°	986.1	986.1	928.5	889.7	864.3	893.0	946.3	959.5	964.1	943.9	884.2
32.5°	1264.3	1264.3	1157.8	1059.2	962.9	962.9	1023.8	1048.1	1052.6	1029.4	959.5
35°	1618.7	1616.6	1457.1	1321.9	1133.5	1062.5	1114.6	1155.7	1169.0	1138.0	1057.0
37.5°	1995.6	1981.1	1809.4	1654.3	1396.1	1222.1	1237.7	1291.9	1304.1	1278.6	1183.3
40°	2301.3	2284.7	2146.2	2016.5	1735.2	1477.0	1414.9	1464.7	1479.1	1443.8	1334.1
42.5°	2578.3	2537.4	2442.0	2349.0	2125.2	1917.9	1650.9	1670.8	1686.4	1648.7	1503.6
45°	2778.8	2715.8	2667.0	2638.1	2519.6	2402.2	1956.8	1916.9	1922.5	1875.8	1688.6
47.5°	2784.4	2740.1	2744.5	2819.9	2868.6	2864.2	2354.5	2212.6	2191.7	2114.2	1885.8
50°	2518.5	2544.0	2624.8	2839.8	3103.6	3263.1	2827.7	2562.9	2499.7	2360.0	2081.9
52.5°	2075.3	2115.1	2267.1	2629.2	3137.9	3525.7	3318.5	2962.8	2849.9	2603.7	2232.6
55°	1625.5	1627.6	1787.2	2156.2	2908.5	3573.3	3710.7	3402.7	3229.9	2788.9	2332.4
57.5°	1118.0	1178.9	1381.8	1629.9	2391.1	3336.2	3858.1	3744.0	3521.3	2903.0	2402.2
60°	732.4	735.7	971.7	1258.6	1627.6	2714.6	3768.3	3924.5	3757.3	2970.5	2449.8
62°	516.3	521.8	668.1	1028.2	1226.5	1945.6	3570.0	3962.2	3890.2	3010.5	2499.7
62.5°	478.6	483.1	606.0	970.6	1152.3	1745.0	3499.1	3953.4	3910.1	3023.8	2517.4
65°	351.2	351.2	396.7	667.0	844.2	943.0	2965.0	3777.3	3883.6	3130.1	2583.9
67.5°	271.5	273.7	289.2	411.1	637.1	571.7	1892.5	3380.5	3606.5	3287.4	2621.6
70°	233.7	232.8	243.8	272.5	459.8	380.1	833.2	2638.1	3020.5	3247.6	2587.2
72.5°	172.8	173.9	199.5	239.3	320.2	247.0	376.7	1400.5	1958.9	2541.8	2217.1
75°	110.9	111.8	140.8	188.4	230.4	161.8	217.2	417.7	802.1	1409.4	1356.3
77.5°	74.2	76.4	91.9	131.8	201.7	100.8	136.4	175.1	241.6	528.6	486.4
80°	49.9	49.9	58.7	88.7	127.4	84.3	73.1	116.3	125.3	164.0	81.9
82.5°	33.2	33.2	38.7	58.7	83.2	75.4	44.3	63.2	73.1	81.9	28.8
85°	19.9	19.9	26.6	36.7	54.3	42.1	28.8	35.5	37.6	52.1	15.5
87.5°	12.1	11.0	17.7	25.5	28.8	25.5	18.9	18.9	19.9	28.8	7.7
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°	542.9	542.9	542.9	542.9	542.9	542.9	542.9	542.9	542.9	542.9	542.9
2.5°	541.8	540.7	539.6	537.4	534.0	531.8	529.6	527.5	525.1	525.1	528.6
5°	551.7	548.4	544.1	539.6	533.0	528.6	525.1	520.7	518.5	518.5	519.7
7.5°	564.0	560.6	552.8	545.1	535.2	527.5	519.7	509.7	502.0	498.6	502.0
10°	577.3	572.8	561.8	549.6	538.5	518.5	493.1	462.1	435.5	423.2	428.9
12.5°	593.9	588.4	575.0	558.4	533.0	484.1	421.0	349.0	303.5	282.5	287.0
15°	618.3	610.5	591.7	566.2	509.7	404.4	301.4	218.3	176.2	158.5	160.6
17.5°	647.0	637.1	611.7	564.0	449.8	291.4	179.5	127.4	109.8	105.2	105.2
20°	678.1	664.7	631.6	547.3	359.1	182.8	111.8	97.5	90.9	87.6	87.6
22.5°	710.2	692.6	648.1	508.6	255.9	114.2	91.9	81.9	74.2	71.0	71.0
25°	748.9	725.7	664.7	441.0	162.9	91.9	78.7	68.7	60.9	56.6	57.6
27.5°	794.5	764.5	679.2	356.7	105.2	79.8	65.3	55.3	48.8	46.5	46.5
30°	842.2	806.6	682.5	267.1	85.2	68.7	54.3	45.5	41.1	38.7	38.7
32.5°	907.5	860.9	672.6	177.2	72.0	57.6	45.5	37.6	34.3	33.2	33.2
35°	993.9	931.8	649.3	109.8	60.9	47.6	37.6	33.2	30.0	28.8	28.8
37.5°	1103.6	1030.4	608.3	75.4	52.1	38.7	32.1	28.8	26.6	25.5	25.5
40°	1249.8	1150.1	555.2	65.3	44.3	33.2	27.7	25.5	23.3	23.3	23.3
42.5°	1404.9	1295.3	486.4	57.6	37.6	28.8	24.3	22.2	21.0	19.9	19.9
45°	1574.5	1443.8	401.2	50.9	32.1	25.5	22.2	18.9	17.7	17.7	17.7
47.5°	1742.9	1596.6	307.9	44.3	27.7	22.2	18.9	16.6	15.5	14.5	14.5
50°	1915.7	1735.2	226.1	38.7	24.3	19.9	16.6	14.5	12.1	11.0	11.0
52.5°	2040.9	1818.2	165.1	33.2	21.0	16.6	13.2	11.0	8.9	7.7	7.7
55°	2132.9	1869.3	120.8	27.7	18.9	14.5	11.0	8.9	6.6	6.6	5.5
57.5°	2204.9	1893.5	90.9	24.3	16.6	12.1	8.9	6.6	5.5	4.4	4.4
60°	2260.3	1894.6	67.6	19.9	14.5	10.1	6.6	4.4	3.4	3.4	3.4
62°	2333.4	1909.1	55.3	16.6	13.2	8.9	5.5	3.4	2.2	1.1	1.1
62.5°	2354.5	1914.6	53.2	16.6	12.1	7.7	4.4	3.4	2.2	1.1	1.1
65°	2452.1	1924.6	41.1	13.2	10.1	6.6	3.4	2.2	0.0	0.0	0.0
67.5°	2540.6	1909.1	30.0	10.1	7.7	4.4	3.4	1.1	0.0	0.0	0.0
70°	2531.9	1802.7	21.0	6.6	5.5	3.4	2.2	0.0	0.0	0.0	0.0
72.5°	2086.4	1349.6	14.5	5.5	3.4	2.2	1.1	0.0	0.0	0.0	0.0
75°	1259.9	590.5	10.1	3.4	3.4	2.2	1.1	0.0	0.0	0.0	0.0
77.5°	413.3	213.8	6.6	2.2	2.2	1.1	1.1	0.0	0.0	0.0	0.0
80°	67.6	35.5	3.4	2.2	2.2	1.1	1.1	0.0	0.0	0.0	0.0
82.5°	21.0	8.9	2.2	2.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0
85°	7.7	3.4	2.2	2.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	2.2	2.2	2.2	1.1	1.1	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)