

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: P398094

Luminaire Tested: **ARCH-S-PA1-80-830-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398094
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-80-830-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6702 lumens
Efficiency: N/A
Efficacy: 80.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B0 - U0 - G2

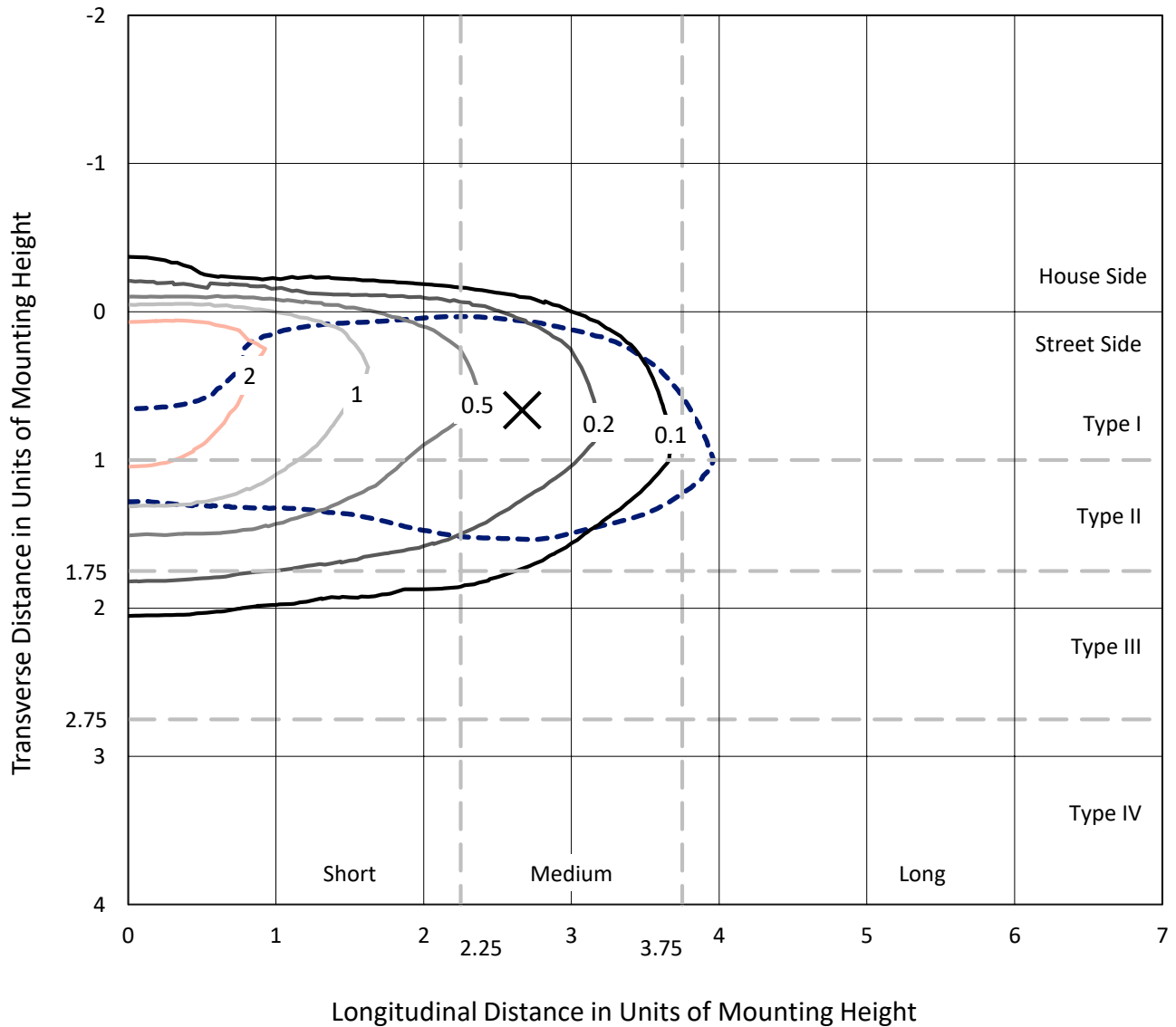
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

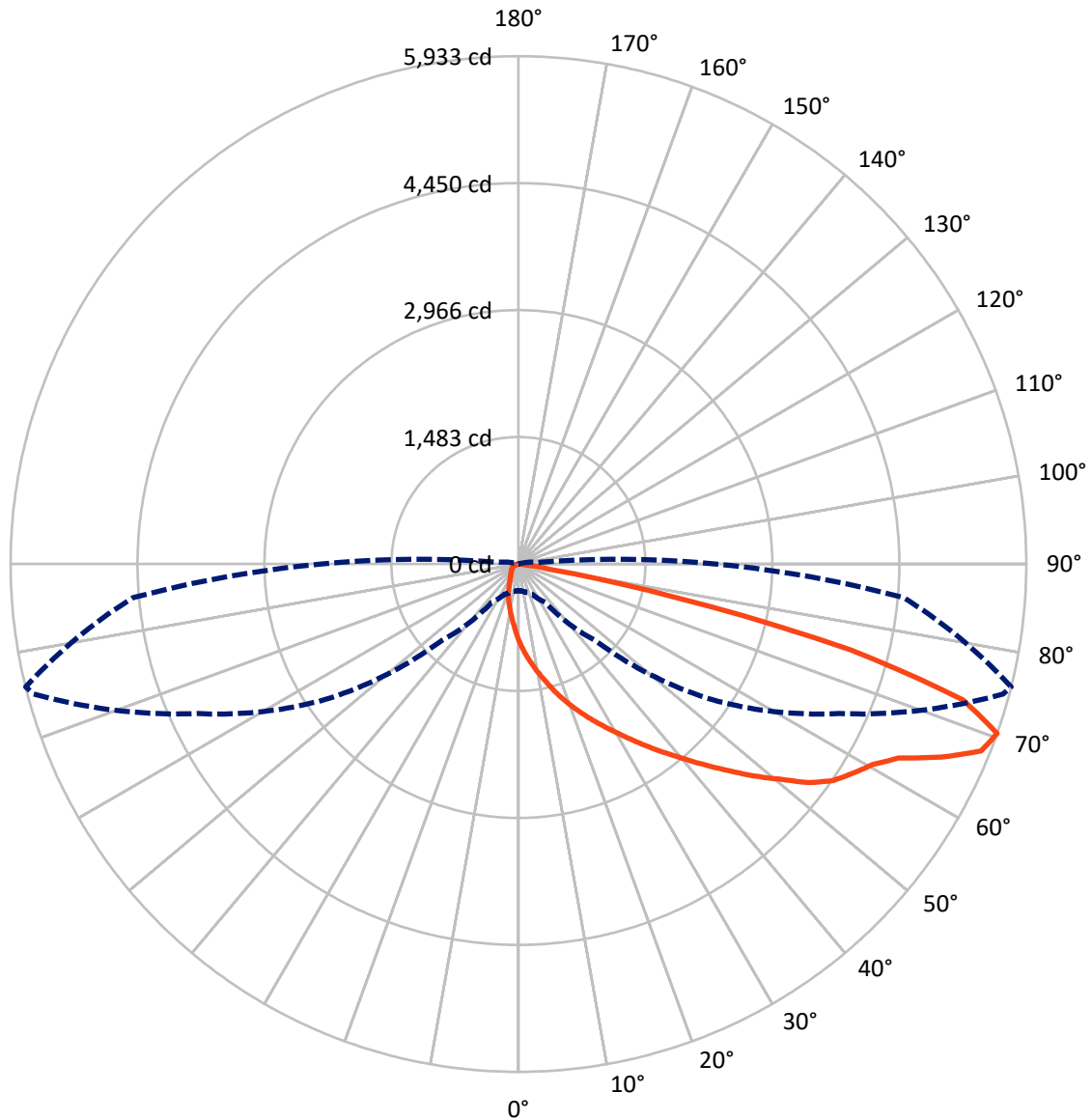
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



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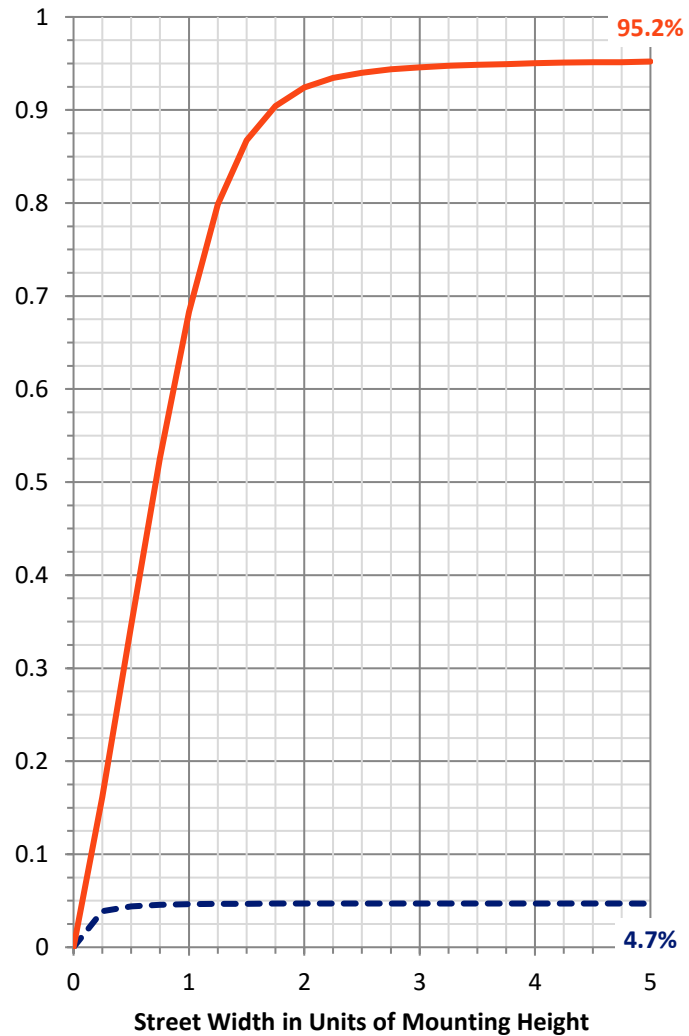
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	316.1	0.0	316.1
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	6385.9	0.0	6385.9
	% Fixture	95.3	0.0	95.3
Total	Lumens	6702.0	0.0	6702.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.5	1.3
10°-20°	272.8	4.1
20°-30°	508.0	7.6
30°-40°	898.5	13.4
40°-50°	1374.1	20.5
50°-60°	1557.9	23.2
60°-70°	1335.5	19.9
70°-80°	646.8	9.7
80°-90°	24.0	0.4
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°	6702.0	100.0
0°-180°	6702.0	100.0

Coefficient of Utilization



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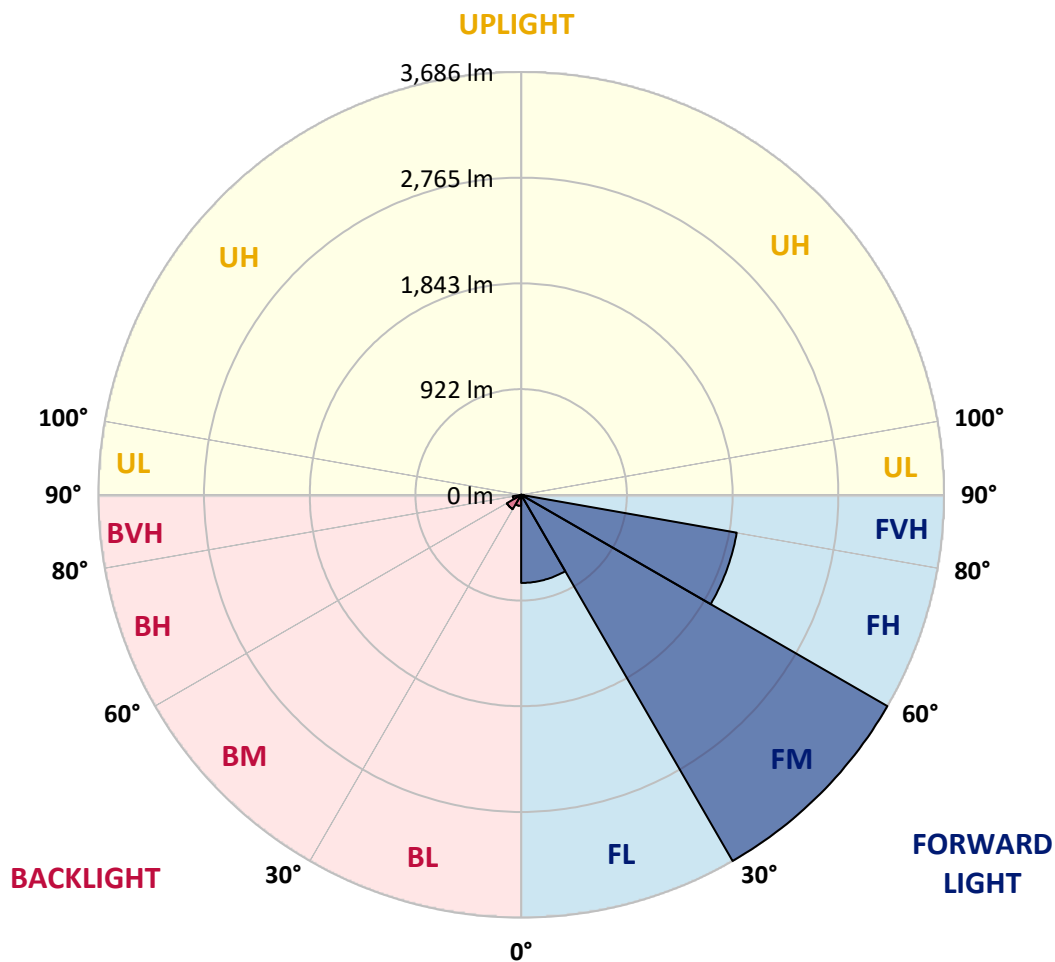
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	768.3	11.5			
FM	(30°-60°)	3686.2	55.0			
FH	(60°-80°)	1907.9	28.5			G2/5000
FVH	(80°-90°)	23.6	0.4			G1/100
BL	(0°-30°)	97.0	1.4	B0/110		
BM	(30°-60°)	144.3	2.2	B0/220		
BH	(60°-80°)	74.4	1.1	B0/110		G0/110
BVH	(80°-90°)	0.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1
2.5°	1226.3	1219.6	1212.9	1187.2	1163.8	1142.6	1102.4	1050.0	1003.1	993.1	938.4
5°	1440.5	1432.7	1422.6	1397.0	1366.9	1331.2	1272.0	1191.7	1109.1	1091.3	989.7
7.5°	1585.6	1578.9	1564.4	1552.1	1522.0	1487.4	1421.5	1327.8	1214.0	1191.7	1048.9
10°	1684.9	1680.4	1678.2	1668.1	1645.8	1617.9	1552.1	1453.9	1320.0	1294.3	1111.3
12.5°	1720.6	1720.6	1731.7	1748.5	1751.8	1742.9	1682.6	1584.4	1431.6	1404.8	1185.0
15°	1672.6	1678.2	1702.7	1756.3	1812.1	1848.9	1810.9	1719.5	1554.3	1525.3	1272.0
17.5°	1659.2	1664.8	1681.5	1728.4	1803.1	1901.3	1920.3	1850.0	1670.4	1645.8	1361.3
20°	1697.1	1702.7	1717.2	1757.4	1814.3	1913.6	1992.8	1976.1	1793.1	1767.4	1451.7
22.5°	1787.5	1790.9	1790.9	1822.1	1872.3	1946.0	2038.6	2095.5	1919.2	1891.3	1540.9
25°	1981.7	1975.0	1948.2	1932.6	1964.9	2025.2	2096.6	2200.4	2059.8	2021.8	1636.9
27.5°	2236.1	2258.4	2193.7	2118.9	2094.4	2129.0	2178.0	2293.0	2195.9	2155.7	1723.9
30°	2580.9	2571.9	2487.1	2380.0	2274.0	2261.7	2278.5	2372.2	2332.0	2294.1	1821.0
32.5°	2864.3	2881.0	2791.7	2661.2	2502.7	2428.0	2410.1	2467.0	2477.1	2452.5	1935.9
35°	3155.5	3173.3	3086.3	2941.3	2752.7	2627.7	2576.4	2584.2	2656.7	2625.5	2056.4
37.5°	3416.6	3432.2	3346.3	3197.9	3009.3	2856.5	2782.8	2722.6	2830.8	2802.9	2183.6
40°	3615.2	3617.4	3559.4	3426.6	3248.1	3089.7	3006.0	2887.7	3014.9	2995.9	2316.4
42.5°	3755.8	3760.3	3717.9	3604.0	3438.9	3291.6	3223.6	3083.0	3226.9	3210.2	2470.4
45°	3821.6	3829.4	3825.0	3720.1	3582.8	3455.6	3433.3	3290.5	3459.0	3443.4	2647.8
47.5°	3759.1	3759.1	3816.0	3801.5	3675.5	3590.7	3616.3	3507.0	3711.2	3696.7	2828.6
50°	3499.2	3502.5	3618.5	3784.8	3711.2	3692.2	3772.5	3719.0	3939.9	3948.8	3045.0
52.5°	2816.3	2810.7	3202.4	3521.5	3686.6	3737.9	3916.5	3935.4	4214.4	4241.2	3260.4
55°	2104.4	2101.1	2476.0	3055.1	3514.8	3714.5	3996.8	4128.5	4448.7	4465.4	3421.1
57.5°	1665.9	1657.0	1863.4	2462.6	3126.5	3609.6	4000.2	4165.3	4579.3	4608.3	3577.3
60°	1280.9	1273.1	1427.1	1832.1	2576.4	3330.7	3904.2	4167.5	4705.3	4756.7	3787.0
62.5°	916.1	925.0	1043.3	1314.4	1981.7	2936.8	3779.2	4198.8	4929.6	4987.6	4085.0
65°	618.2	613.7	711.9	894.9	1409.3	2406.8	3587.3	4264.6	5333.5	5435.1	4442.0
67.5°	429.6	432.9	477.6	582.4	894.9	1847.8	3268.2	4301.4	5750.8	5830.1	4692.0
70°	310.2	314.7	339.2	391.6	546.7	1253.0	2762.7	4132.9	5863.5	5932.7	4517.9
72.5°	204.2	213.1	249.9	277.8	349.2	784.4	2035.2	3560.5	5378.2	5429.5	3790.4
75°	110.5	112.7	160.7	207.5	248.8	488.7	1214.0	2401.2	4023.6	4006.8	2499.4
77.5°	85.9	89.3	99.3	148.4	167.4	268.9	479.8	1084.6	1905.8	1854.5	852.5
80°	52.4	54.7	69.2	88.1	117.2	156.2	140.6	294.6	387.2	362.6	125.0
82.5°	31.2	33.5	41.3	73.6	92.6	73.6	49.1	71.4	72.5	71.4	31.2
85°	5.6	5.6	29.0	51.3	49.1	21.2	29.0	23.4	21.2	22.3	6.7
87.5°	0.0	0.0	11.2	15.6	22.3	7.8	11.2	5.6	5.6	5.6	3.3
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°	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1
2.5°	904.9	867.0	788.9	720.8	652.7	602.5	564.6	525.5	512.2	495.4	486.5
5°	920.5	845.8	690.7	566.8	461.9	381.6	330.3	299.0	279.0	264.4	261.1
7.5°	944.0	829.0	611.5	444.1	329.2	248.8	206.4	185.2	174.1	167.4	165.1
10°	971.9	814.5	533.4	345.9	232.1	175.2	151.7	142.8	138.4	136.1	135.0
12.5°	1010.9	809.0	467.5	266.7	175.2	143.9	131.7	126.1	122.7	119.4	118.3
15°	1062.2	811.2	407.3	206.4	145.1	128.3	118.3	112.7	108.2	104.9	104.9
17.5°	1115.8	814.5	348.1	167.4	131.7	117.2	106.0	98.2	94.8	91.5	90.4
20°	1166.0	813.4	291.2	142.8	119.4	104.9	93.7	85.9	80.3	77.0	77.0
22.5°	1214.0	806.7	237.7	128.3	109.3	92.6	80.3	72.5	68.1	64.7	64.7
25°	1265.3	793.3	194.1	117.2	97.1	81.5	69.2	61.4	58.0	54.7	54.7
27.5°	1305.5	771.0	158.4	107.1	85.9	70.3	59.1	52.4	49.1	46.9	46.9
30°	1349.0	738.7	131.7	96.0	74.8	60.3	50.2	44.6	41.3	40.2	40.2
32.5°	1397.0	703.0	112.7	84.8	63.6	51.3	42.4	39.1	35.7	34.6	34.6
35°	1452.8	671.7	101.5	73.6	55.8	43.5	36.8	33.5	31.2	31.2	31.2
37.5°	1516.4	639.4	91.5	64.7	48.0	36.8	31.2	30.1	29.0	27.9	27.9
40°	1585.6	604.8	82.6	56.9	41.3	31.2	26.8	26.8	25.7	25.7	25.7
42.5°	1663.7	574.6	74.8	50.2	35.7	26.8	23.4	23.4	22.3	22.3	22.3
45°	1748.5	546.7	68.1	44.6	31.2	23.4	21.2	20.1	19.0	19.0	19.0
47.5°	1848.9	531.1	62.5	39.1	26.8	20.1	17.9	16.7	15.6	14.5	14.5
50°	1977.2	537.8	56.9	32.4	23.4	16.7	14.5	13.4	12.3	11.2	11.2
52.5°	2078.7	534.5	49.1	27.9	19.0	13.4	11.2	10.0	8.9	7.8	7.8
55°	2152.4	521.1	42.4	23.4	14.5	11.2	8.9	6.7	5.6	5.6	5.6
57.5°	2224.9	507.7	35.7	19.0	11.2	7.8	5.6	4.5	4.5	4.5	4.5
60°	2337.6	488.7	31.2	15.6	8.9	5.6	3.3	3.3	2.2	2.2	2.2
62.5°	2474.9	465.3	25.7	13.4	6.7	4.5	2.2	2.2	0.0	0.0	0.0
65°	2625.5	424.0	21.2	10.0	5.6	3.3	2.2	0.0	0.0	0.0	0.0
67.5°	2590.9	340.3	17.9	6.7	4.5	2.2	1.1	0.0	0.0	0.0	0.0
70°	2291.9	229.9	14.5	5.6	3.3	2.2	1.1	0.0	0.0	0.0	0.0
72.5°	1795.3	136.1	10.0	4.5	2.2	1.1	0.0	0.0	0.0	0.0	0.0
75°	1149.3	68.1	6.7	3.3	2.2	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	385.0	33.5	4.5	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	54.7	11.2	2.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	12.3	4.5	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.5	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	1.1	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)