

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: P400404

Luminaire Tested: **ARCH-L-PA3-270-830-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400404
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-270-830-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20218 lumens
Efficiency: N/A
Efficacy: 74.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G4

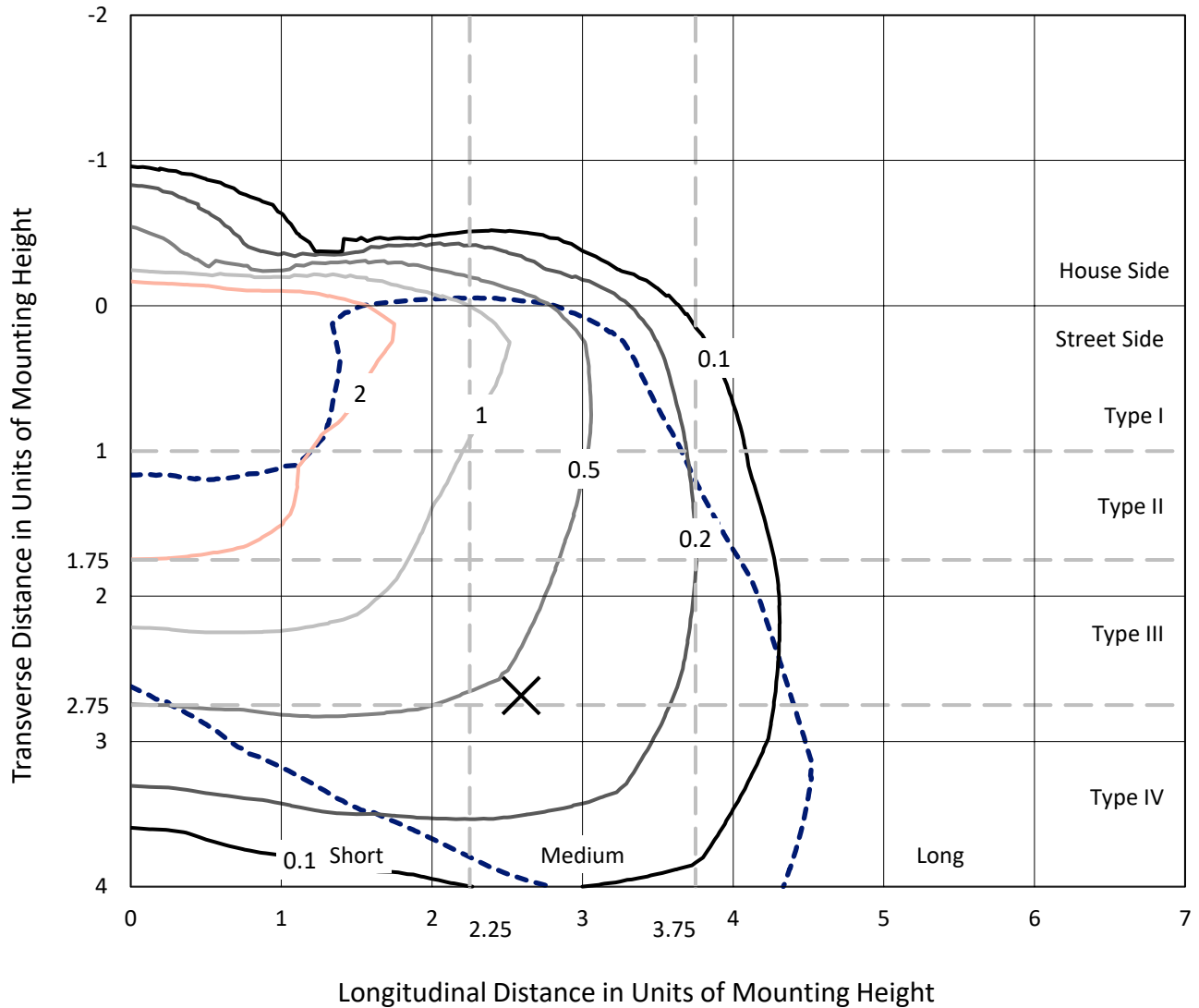
Input Watts (W): 273
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

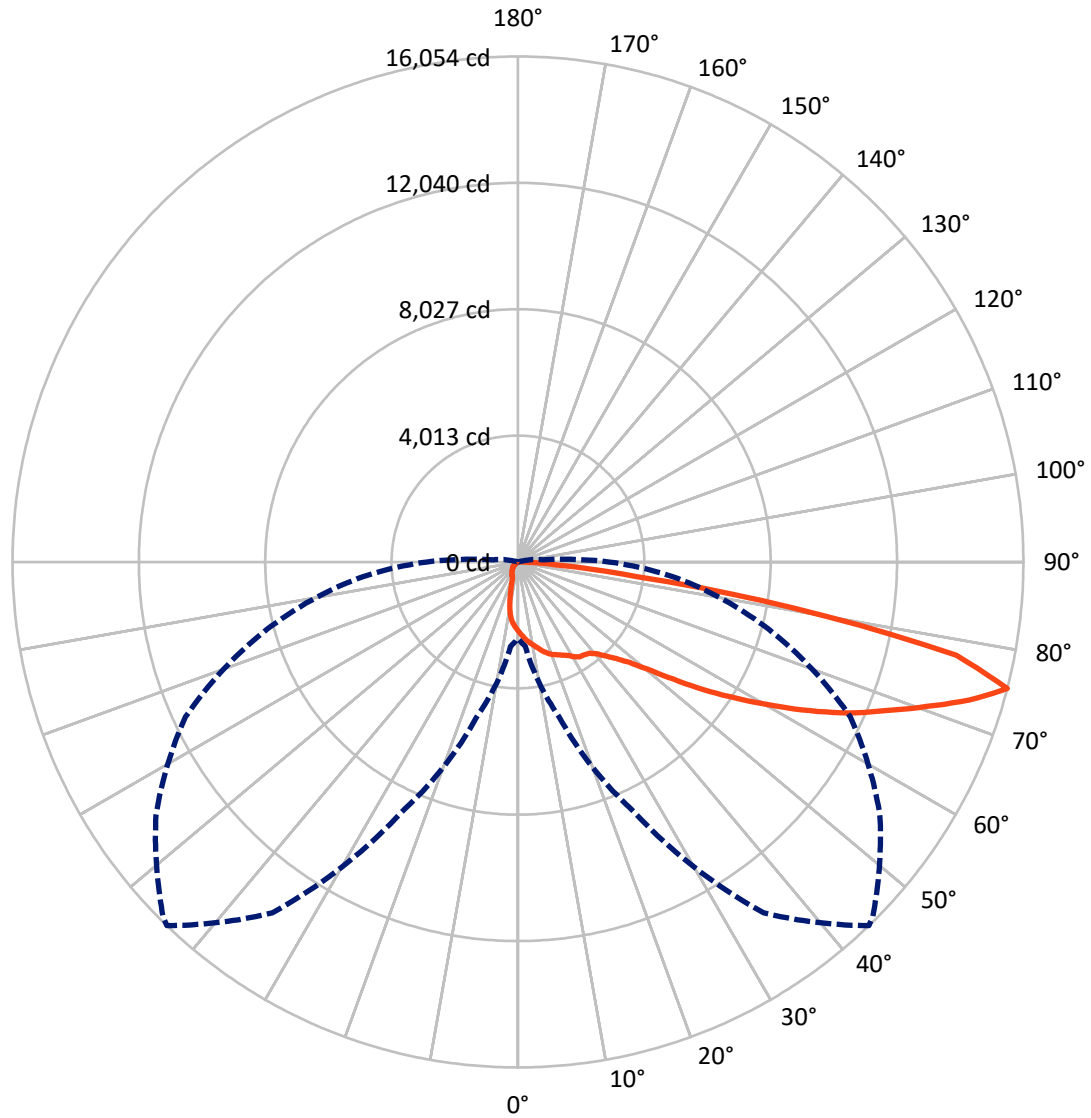
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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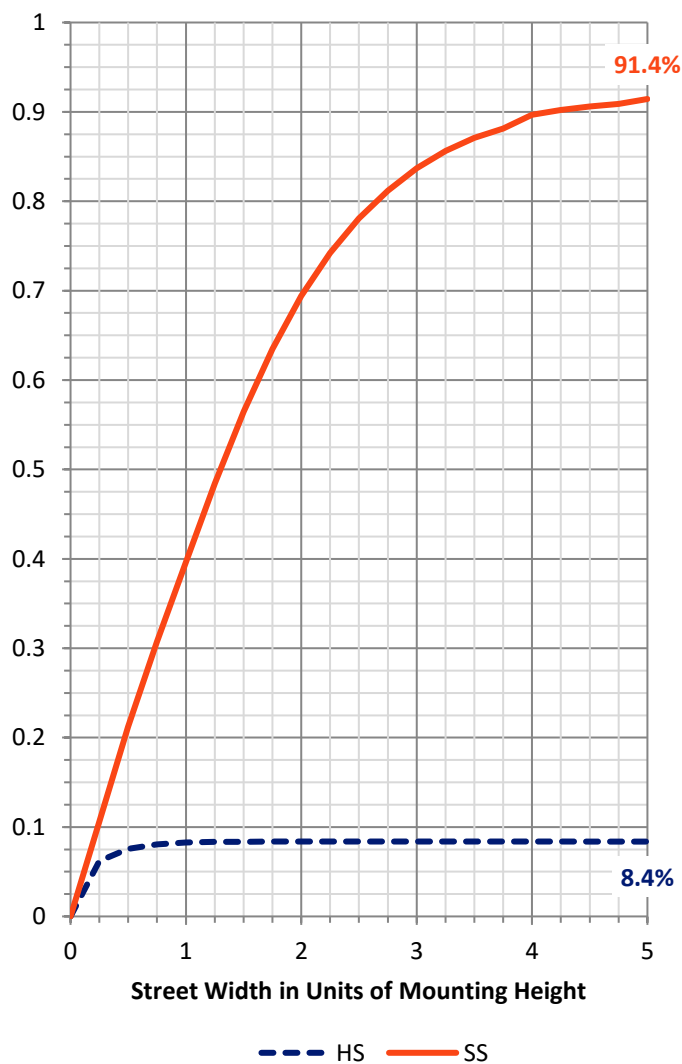
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1705.0	0.0	1705.0
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	18513.0	0.0	18513.0
	% Fixture	91.6	0.0	91.6
Total	Lumens	20218.0	0.0	20218.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.5	1.0
10°-20°	581.5	2.9
20°-30°	959.7	4.7
30°-40°	1392.9	6.9
40°-50°	2264.3	11.2
50°-60°	3991.7	19.7
60°-70°	5736.9	28.4
70°-80°	4594.0	22.7
80°-90°	489.4	2.4
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°	20218.0	100.0
0°-180°	20218.0	100.0

Coefficient of Utilization



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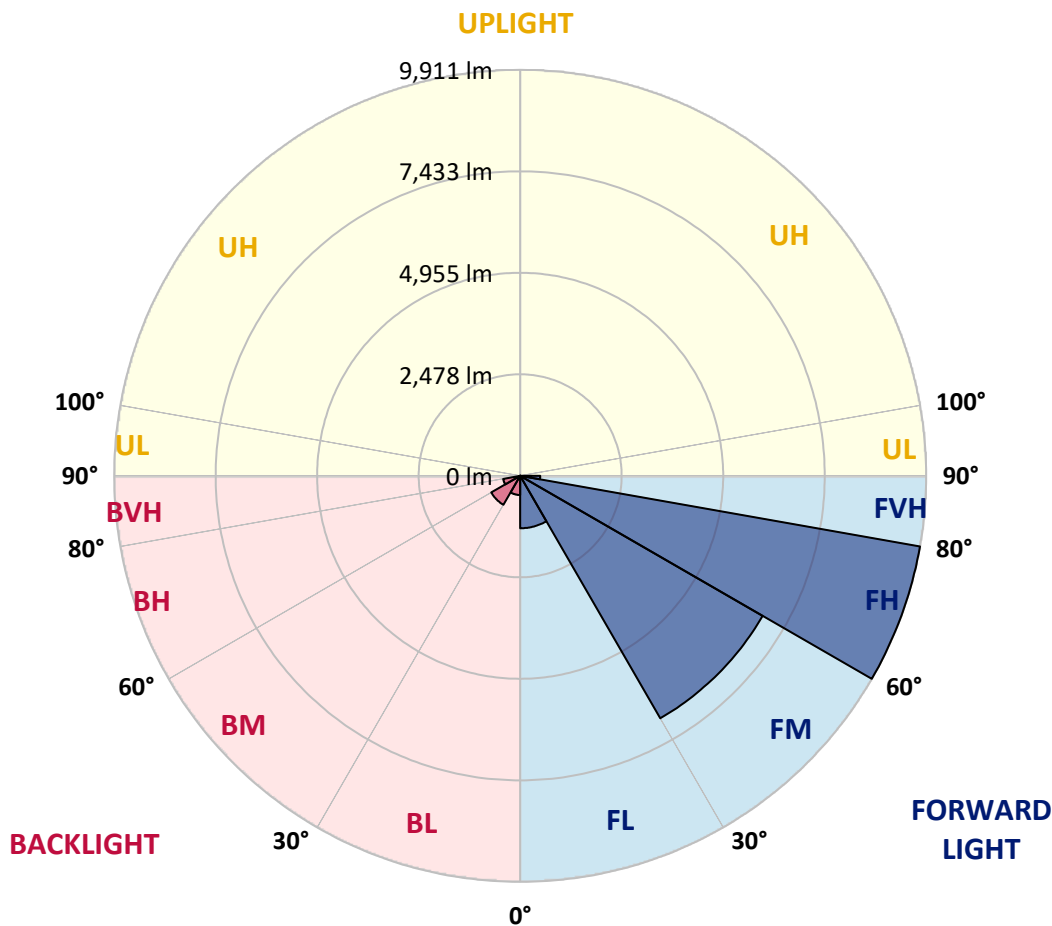
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1280.4	6.3			
FM (30°-60°)	6833.9	33.8			
FH (60°-80°)	9910.5	49.0			G4/12000
FVH (80°-90°)	488.2	2.4			G3/500
BL (0°-30°)	468.4	2.3	B1/500		
BM (30°-60°)	815.0	4.0	B1/1000		
BH (60°-80°)	420.3	2.1	B1/500		G1/500
BVH (80°-90°)	1.2	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-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2200.7	2200.7	2200.7	2200.7	2200.7	2200.7	2200.7	2200.7	2200.7	2200.7	2200.7
2.5°	2398.3	2394.6	2383.4	2364.8	2346.1	2327.5	2323.7	2293.9	2260.3	2234.2	2211.8
5°	2610.9	2607.2	2588.6	2547.5	2506.5	2458.0	2454.3	2383.4	2320.0	2249.1	2189.5
7.5°	2831.0	2823.5	2790.0	2726.6	2655.7	2581.1	2573.6	2469.2	2376.0	2282.7	2196.9
10°	3002.6	2995.1	2946.6	2872.0	2775.1	2681.8	2670.6	2562.5	2469.2	2349.8	2234.2
12.5°	3170.4	3155.5	3092.1	3010.0	2890.7	2801.2	2790.0	2678.1	2566.2	2443.1	2301.4
15°	3327.1	3308.4	3248.8	3144.3	3017.5	2931.7	2924.3	2804.9	2689.3	2547.5	2390.9
17.5°	3435.3	3427.8	3356.9	3241.3	3118.2	3047.3	3039.9	2916.8	2801.2	2652.0	2484.1
20°	3491.2	3491.2	3424.1	3297.2	3185.4	3136.9	3125.7	3010.0	2898.1	2756.4	2581.1
22.5°	3502.4	3513.6	3461.4	3323.4	3241.3	3200.3	3192.8	3092.1	2983.9	2853.4	2689.3
25°	3524.8	3524.8	3498.7	3349.5	3289.8	3278.6	3274.9	3185.4	3088.4	2957.8	2797.4
27.5°	3550.9	3550.9	3532.2	3386.8	3364.4	3360.7	3356.9	3315.9	3237.6	3084.6	2924.3
30°	3618.0	3621.8	3606.8	3461.4	3446.4	3487.5	3494.9	3472.6	3375.6	3185.4	3054.8
32.5°	3785.9	3752.3	3711.3	3513.6	3539.7	3591.9	3595.6	3550.9	3446.4	3293.5	3211.5
35°	4207.3	4009.7	3823.2	3558.3	3569.5	3621.8	3629.2	3625.5	3562.1	3431.5	3390.5
37.5°	4599.0	4319.2	4054.4	3662.8	3625.5	3681.4	3696.4	3759.8	3711.3	3621.8	3632.9
40°	4826.5	4718.3	4531.9	3950.0	3737.4	3823.2	3838.1	3935.1	3916.4	3879.1	3950.0
42.5°	5527.7	5535.2	5333.8	4378.9	3942.5	4080.5	4099.2	4177.5	4203.6	4222.3	4393.8
45°	6340.9	6367.0	6318.5	5151.0	4330.4	4375.2	4401.3	4505.7	4602.7	4722.1	5035.4
47.5°	7318.1	7295.7	7116.7	6094.7	5005.6	4755.6	4774.3	4975.7	5143.6	5404.7	5852.2
50°	8183.4	8239.4	7900.0	6974.9	5956.7	5356.2	5337.5	5535.2	5837.3	6202.9	6766.1
52.5°	9056.2	8974.2	8515.4	7847.8	7083.1	6173.0	6117.1	6225.2	6650.4	7083.1	7661.3
55°	9287.5	9295.0	9138.3	8802.6	8023.1	7165.2	7071.9	7064.5	7594.1	7888.8	8601.2
57.5°	9742.6	9761.2	9798.5	9865.6	9496.4	8157.3	8060.4	7955.9	8470.6	8642.2	9544.9
60°	10205.1	10227.4	10455.0	10816.8	10570.6	9227.8	9123.4	8877.2	9164.4	9395.7	10537.0
62.5°	10145.4	10302.0	10962.2	11682.1	11652.3	10402.7	10272.2	9679.1	9861.9	10063.3	11447.1
65°	9160.7	9328.5	10813.0	11920.8	12737.7	11562.8	11350.1	10507.2	10518.4	10760.8	12323.7
67.5°	8280.4	8463.2	9880.6	11820.1	13453.8	12603.4	12383.3	11339.0	11163.6	11566.5	12793.6
70°	7773.2	7955.9	9138.3	11506.8	13655.2	13755.9	13565.7	12290.1	11932.0	12301.3	12267.7
72.5°	6083.5	6370.7	8190.9	10910.0	13871.6	14990.5	14841.4	13494.8	12584.7	11532.9	9339.7
75°	2424.4	2689.3	5113.7	8780.2	13599.3	16053.6	15937.9	14035.7	11648.5	8235.7	4781.8
77.5°	731.1	783.3	1421.1	4341.6	9970.1	14233.4	14196.1	11801.5	8243.1	3823.2	1305.5
80°	242.4	268.6	436.4	1197.3	4550.5	8892.1	9060.0	7519.5	3744.8	876.5	264.8
82.5°	100.7	111.9	220.1	481.2	1611.3	3830.6	3774.7	3368.1	1305.5	544.6	97.0
85°	26.1	33.6	100.7	276.0	589.3	1320.4	1387.5	1130.2	738.5	451.3	29.8
87.5°	0.0	0.0	48.5	111.9	264.8	399.1	417.8	343.2	417.8	339.4	14.9
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°	2200.7	2200.7	2200.7	2200.7	2200.7	2200.7	2200.7	2200.7	2200.7	2200.7	2200.7
2.5°	2193.2	2174.5	2141.0	2118.6	2088.8	2081.3	2066.4	2047.7	2044.0	2025.3	2029.1
5°	2155.9	2126.1	2066.4	2025.3	1976.9	1961.9	1935.8	1917.2	1902.3	1876.1	1879.9
7.5°	2148.4	2103.7	2021.6	1943.3	1865.0	1809.0	1730.7	1667.3	1615.1	1559.1	1570.3
10°	2174.5	2118.6	2003.0	1894.8	1753.1	1574.0	1368.9	1234.6	1167.5	1100.3	1107.8
12.5°	2226.8	2159.6	2010.4	1846.3	1559.1	1253.3	969.8	787.0	738.5	708.7	712.4
15°	2305.1	2223.0	2032.8	1753.1	1298.0	906.4	645.3	566.9	585.6	596.8	596.8
17.5°	2387.1	2293.9	2051.5	1585.2	1003.3	634.1	525.9	518.5	544.6	570.7	570.7
20°	2487.9	2368.5	2055.2	1372.6	723.6	514.7	496.1	496.1	514.7	544.6	544.6
22.5°	2584.8	2450.6	2021.6	1130.2	552.0	477.4	477.4	477.4	488.6	518.5	522.2
25°	2700.5	2551.3	1950.7	872.8	473.7	455.1	455.1	458.8	466.2	492.3	496.1
27.5°	2823.5	2655.7	1831.4	637.8	432.7	428.9	432.7	436.4	440.1	466.2	473.7
30°	2965.3	2771.3	1678.5	477.4	395.4	395.4	406.6	414.0	414.0	436.4	443.9
32.5°	3129.4	2924.3	1495.7	395.4	358.1	354.3	373.0	384.2	384.2	402.8	410.3
35°	3334.5	3080.9	1275.6	350.6	328.2	320.8	328.2	346.9	354.3	369.3	373.0
37.5°	3606.8	3267.4	1040.6	324.5	305.9	290.9	290.9	294.7	309.6	324.5	328.2
40°	3953.7	3472.6	809.4	305.9	283.5	268.6	257.4	253.6	249.9	261.1	268.6
42.5°	4390.1	3703.8	604.2	287.2	264.8	242.4	227.5	212.6	194.0	190.2	194.0
45°	4949.6	3987.3	447.6	272.3	253.6	220.1	194.0	167.8	134.3	123.1	126.8
47.5°	5609.8	4281.9	350.6	257.4	246.2	194.0	160.4	115.6	82.1	74.6	78.3
50°	6311.0	4565.4	298.4	238.7	231.3	167.8	115.6	70.9	48.5	48.5	52.2
52.5°	6907.8	4725.8	272.3	223.8	208.9	138.0	74.6	41.0	29.8	29.8	33.6
55°	7485.9	4811.6	253.6	208.9	179.0	97.0	41.0	26.1	18.6	18.6	18.6
57.5°	8082.7	4848.9	231.3	190.2	141.7	59.7	22.4	14.9	11.2	11.2	11.2
60°	8612.4	4778.0	197.7	156.7	93.2	29.8	11.2	11.2	7.5	3.7	3.7
62.5°	9056.2	4643.8	138.0	111.9	55.9	14.9	7.5	3.7	0.0	0.0	0.0
65°	9328.5	4427.4	89.5	74.6	33.6	11.2	3.7	0.0	0.0	0.0	0.0
67.5°	9250.2	4020.9	55.9	48.5	14.9	7.5	3.7	0.0	0.0	0.0	0.0
70°	8347.6	3297.2	41.0	29.8	11.2	3.7	0.0	0.0	0.0	0.0	0.0
72.5°	6016.4	2230.5	29.8	18.6	7.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	2894.4	794.5	18.6	14.9	3.7	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	708.7	175.3	11.2	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	156.7	33.6	7.5	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	52.2	14.9	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	18.6	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.2	3.7	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)