

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: P842603

Luminaire Tested: **ARCH4-70-730-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842603
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-70-730-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 605mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8929 lumens
Efficiency: N/A
Efficacy: 121.0 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 73.8
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: 24 FT

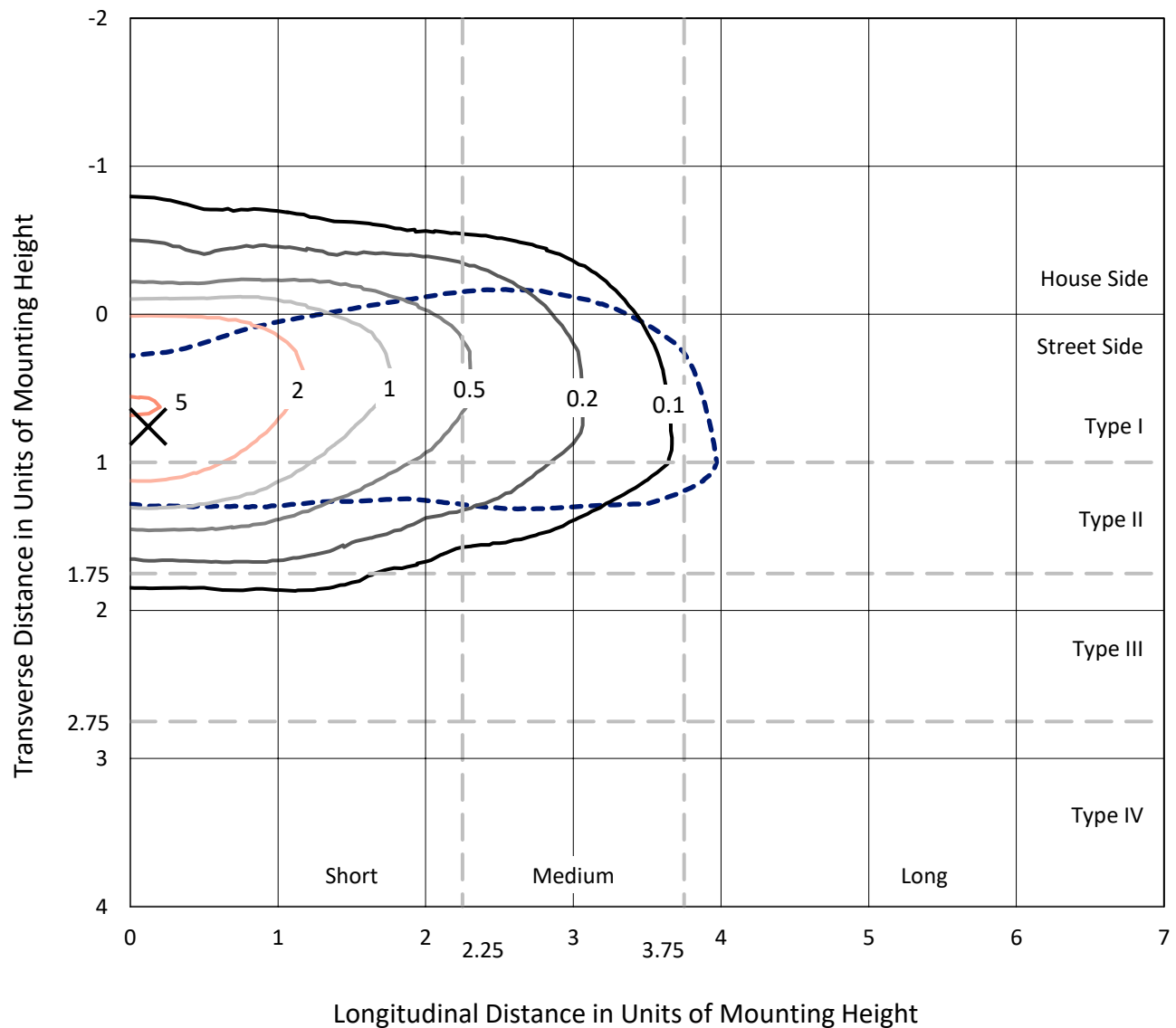


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Iso-Footcandle Lines of Horizontal Illumination

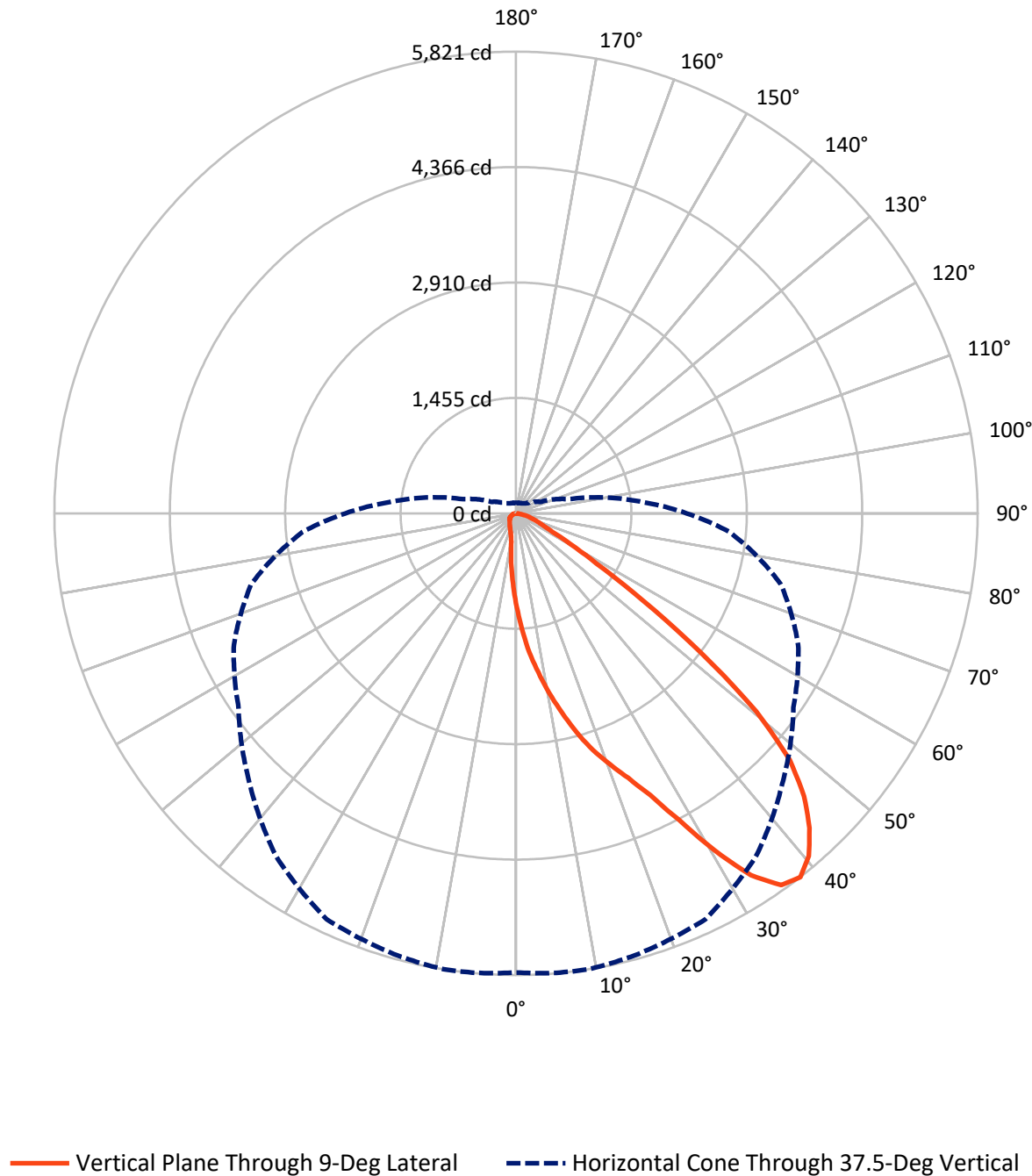
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1085.9	0.0	1085.9
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	7843.1	0.0	7843.1
	% Fixture	87.8	0.0	87.8
Total	Lumens	8929.0	0.0	8929.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.6	1.3
10°-20°	412.4	4.6
20°-30°	847.3	9.5
30°-40°	1497.6	16.8
40°-50°	1989.5	22.3
50°-60°	1886.9	21.1
60°-70°	1439.5	16.1
70°-80°	697.9	7.8
80°-90°	39.3	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°	8929.0	100.0
0°-180°	8929.0	100.0

Coefficient of Utilization



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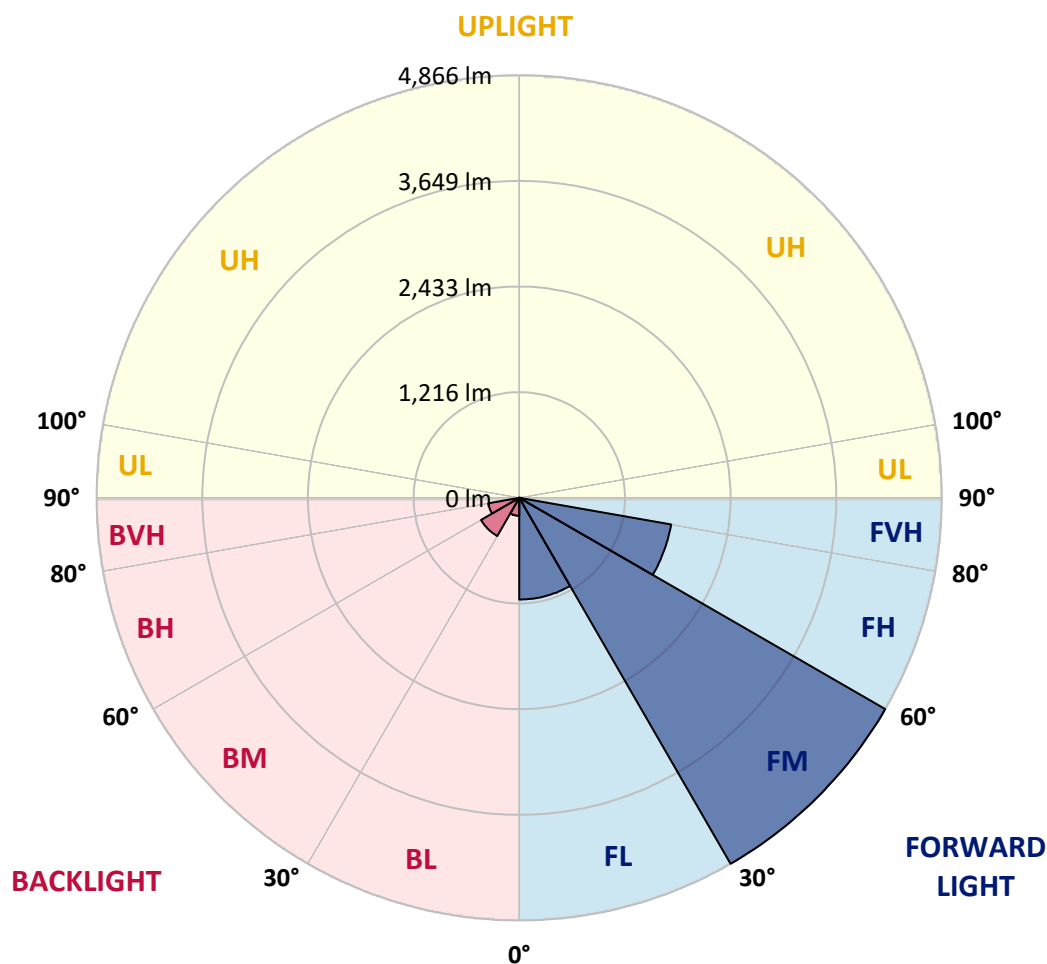
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1171.0	13.1			
FM	(30°-60°)	4865.9	54.5			
FH	(60°-80°)	1775.1	19.9			G1/1800
FVH	(80°-90°)	31.1	0.3			G1/100
BL	(0°-30°)	207.2	2.3	B1/500		
BM	(30°-60°)	508.1	5.7	B1/1000		
BH	(60°-80°)	362.4	4.1	B1/500		G1/500
BVH	(80°-90°)	8.2	0.1			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°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1180.3	1180.3	1180.3	1180.3	1180.3	1180.3	1180.3	1180.3	1180.3	1180.3	1180.3
2.5°	1462.6	1436.9	1466.2	1462.6	1436.9	1420.4	1369.1	1352.6	1292.1	1248.1	1209.6
5°	1763.1	1737.5	1763.1	1755.8	1719.1	1678.8	1594.5	1539.5	1431.4	1336.1	1250.0
7.5°	2012.4	2012.4	2023.4	2025.2	1981.2	1918.9	1814.4	1732.0	1579.9	1433.2	1295.8
10°	2281.8	2283.6	2307.5	2291.0	2232.3	2148.0	2016.1	1911.6	1728.3	1535.9	1339.8
12.5°	2569.5	2571.4	2578.7	2571.4	2501.7	2393.6	2234.2	2096.7	1885.9	1653.2	1400.2
15°	2857.3	2859.1	2868.3	2855.5	2778.5	2652.0	2470.6	2302.0	2052.7	1785.1	1473.5
17.5°	3126.7	3130.4	3137.7	3121.2	3040.6	2890.3	2705.2	2501.7	2230.5	1926.2	1556.0
20°	3368.6	3372.3	3377.8	3355.8	3275.2	3124.9	2925.1	2712.5	2411.9	2071.0	1645.8
22.5°	3612.4	3616.1	3625.2	3595.9	3506.1	3333.8	3137.7	2917.8	2604.4	2230.5	1750.3
25°	3924.0	3927.6	3935.0	3892.8	3770.0	3568.4	3361.3	3135.9	2813.3	2410.1	1878.6
27.5°	4380.3	4376.7	4376.7	4299.7	4088.9	3826.8	3586.7	3357.6	3038.7	2602.5	2019.7
30°	4944.8	4935.7	4930.2	4825.7	4525.1	4118.2	3817.7	3564.7	3255.0	2806.0	2171.8
32.5°	5450.7	5450.7	5439.7	5329.7	5010.8	4510.5	4063.3	3766.3	3463.9	3011.2	2329.5
35°	5749.4	5762.2	5756.7	5674.3	5441.5	4932.0	4395.0	4008.3	3683.9	3225.7	2518.2
37.5°	5789.7	5815.4	5820.9	5771.4	5648.6	5276.6	4763.4	4270.4	3925.8	3456.6	2701.5
40°	5626.6	5681.6	5681.6	5674.3	5630.3	5439.7	5073.1	4574.6	4175.1	3696.7	2886.6
42.5°	5375.5	5432.3	5425.0	5452.5	5441.5	5401.2	5247.2	4858.7	4424.3	3944.1	3055.2
45°	5047.5	5106.1	5091.4	5140.9	5162.9	5206.9	5228.9	5056.6	4669.9	4213.5	3244.0
47.5°	4521.5	4620.4	4642.4	4730.4	4822.0	4959.5	5064.0	5128.1	4899.0	4503.1	3449.3
50°	3744.4	3883.6	3927.6	4112.7	4363.8	4647.9	4816.5	5040.1	5060.3	4800.0	3671.0
52.5°	2681.3	2842.6	2910.4	3214.7	3731.5	4226.4	4530.6	4845.9	5122.6	5084.1	3911.1
55°	1733.8	1871.3	1937.2	2223.2	2910.4	3687.5	4193.4	4594.8	5087.8	5344.4	4186.1
57.5°	1068.5	1147.3	1191.3	1436.9	2069.2	2996.6	3751.7	4363.8	4981.5	5569.8	4472.0
60°	720.3	766.1	788.1	903.6	1405.7	2239.6	3145.0	4121.9	4842.2	5721.9	4732.2
62.5°	478.4	493.0	515.0	586.5	927.4	1572.5	2415.6	3689.4	4737.7	5731.1	4924.7
65°	370.2	377.6	386.7	417.9	571.8	1099.7	1699.0	2989.3	4581.9	5536.8	4985.1
67.5°	291.4	298.7	309.7	326.2	414.2	745.9	1156.5	2190.2	4263.0	5232.6	4886.2
70°	229.1	234.6	241.9	256.6	322.6	540.7	764.3	1455.2	3619.7	4943.0	4574.6
72.5°	181.4	186.9	194.3	208.9	262.1	395.9	524.2	907.2	2791.3	4589.3	3975.3
75°	143.0	146.6	152.1	166.8	210.8	307.9	355.6	542.5	1896.9	3942.3	3097.4
77.5°	71.5	88.0	100.8	115.5	154.0	212.6	236.4	300.6	800.9	2023.4	1477.2
80°	42.2	51.3	55.0	64.1	100.8	128.3	128.3	121.0	252.9	777.1	603.0
82.5°	23.8	33.0	34.8	36.7	60.5	73.3	58.6	44.0	51.3	260.3	175.9
85°	7.3	11.0	12.8	14.7	20.2	22.0	20.2	18.3	14.7	25.7	16.5
87.5°	0.0	0.0	0.0	0.0	1.8	3.7	3.7	3.7	5.5	5.5	5.5
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°	1180.3	1180.3	1180.3	1180.3	1180.3	1180.3	1180.3	1180.3	1180.3	1180.3	1180.3
2.5°	1187.6	1163.8	1118.0	1075.8	1035.5	1006.2	978.7	953.0	934.7	920.1	918.2
5°	1204.1	1156.5	1068.5	986.0	910.9	848.6	795.4	753.3	722.1	700.1	698.3
7.5°	1226.1	1152.8	1019.0	896.2	784.4	694.6	617.6	560.8	520.5	504.0	491.2
10°	1244.5	1149.1	969.5	806.4	659.8	546.2	454.5	397.7	368.4	357.4	351.9
12.5°	1275.6	1152.8	927.4	723.9	551.7	417.9	348.2	317.1	304.2	295.1	293.2
15°	1321.4	1169.3	887.1	643.3	441.7	337.2	296.9	276.7	263.9	262.1	260.3
17.5°	1367.2	1184.0	850.4	560.8	366.6	293.2	265.8	249.3	240.1	238.3	238.3
20°	1420.4	1202.3	810.1	482.0	313.4	263.9	241.9	229.1	218.1	216.3	216.3
22.5°	1482.7	1228.0	771.6	412.4	278.6	241.9	223.6	208.9	199.8	197.9	197.9
25°	1567.0	1266.4	740.4	361.1	254.8	223.6	207.1	194.3	186.9	183.3	183.3
27.5°	1660.5	1319.6	718.4	329.9	238.3	208.9	192.4	181.4	174.1	170.4	170.4
30°	1765.0	1378.2	703.8	317.1	229.1	196.1	181.4	170.4	161.3	159.5	159.5
32.5°	1880.4	1446.1	694.6	318.9	227.3	186.9	170.4	159.5	152.1	148.5	148.5
35°	2008.7	1521.2	689.1	329.9	230.9	179.6	161.3	150.3	143.0	139.3	139.3
37.5°	2151.7	1609.2	689.1	340.9	240.1	177.8	152.1	141.1	135.6	132.0	132.0
40°	2285.5	1702.6	696.5	353.7	249.3	177.8	144.8	135.6	128.3	124.6	124.6
42.5°	2389.9	1755.8	702.0	366.6	254.8	175.9	137.5	128.3	122.8	119.1	119.1
45°	2509.1	1812.6	691.0	372.1	254.8	172.3	132.0	122.8	117.3	113.6	113.6
47.5°	2641.0	1882.3	689.1	375.7	249.3	164.9	126.5	117.3	113.6	110.0	110.0
50°	2774.8	1959.2	692.8	373.9	241.9	154.0	119.1	113.6	108.1	104.5	104.5
52.5°	2926.9	2039.9	700.1	370.2	225.4	141.1	113.6	108.1	102.6	99.0	97.1
55°	3095.6	2127.8	714.8	362.9	203.4	128.3	108.1	102.6	95.3	91.6	89.8
57.5°	3289.8	2236.0	731.3	348.2	179.6	117.3	102.6	95.3	84.3	78.8	77.0
60°	3474.9	2358.8	749.6	313.4	155.8	106.3	97.1	86.1	75.1	71.5	69.6
62.5°	3649.1	2479.7	758.8	251.1	132.0	97.1	91.6	78.8	67.8	64.1	62.3
65°	3760.9	2611.7	738.6	170.4	108.1	89.8	84.3	73.3	62.3	56.8	56.8
67.5°	3768.2	2674.0	669.0	111.8	88.0	80.6	77.0	66.0	55.0	51.3	49.5
70°	3583.1	2580.5	511.3	88.0	73.3	69.6	69.6	58.6	47.7	44.0	42.2
72.5°	3157.9	2285.5	326.2	71.5	62.3	58.6	58.6	49.5	42.2	36.7	34.8
75°	2492.6	1763.1	174.1	58.6	51.3	49.5	45.8	40.3	34.8	31.2	29.3
77.5°	1145.5	777.1	80.6	42.2	38.5	38.5	34.8	29.3	27.5	23.8	23.8
80°	452.7	263.9	40.3	27.5	25.7	25.7	25.7	20.2	20.2	16.5	14.7
82.5°	124.6	55.0	20.2	16.5	16.5	16.5	14.7	12.8	12.8	11.0	11.0
85°	12.8	9.2	9.2	9.2	9.2	7.3	7.3	5.5	3.7	3.7	3.7
87.5°	5.5	5.5	5.5	5.5	5.5	3.7	1.8	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)