

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: McGRAW-EDISON

Report Number: P227836

Luminaire Tested: **ISS-AF-450-LED-E1-T4FT-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227836
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29760)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISS-AF-450-LED-E1-T4FT-8030
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV FORWARD THROW
Light Source: (16) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2418 lumens
Efficiency: N/A
Efficacy: 95.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

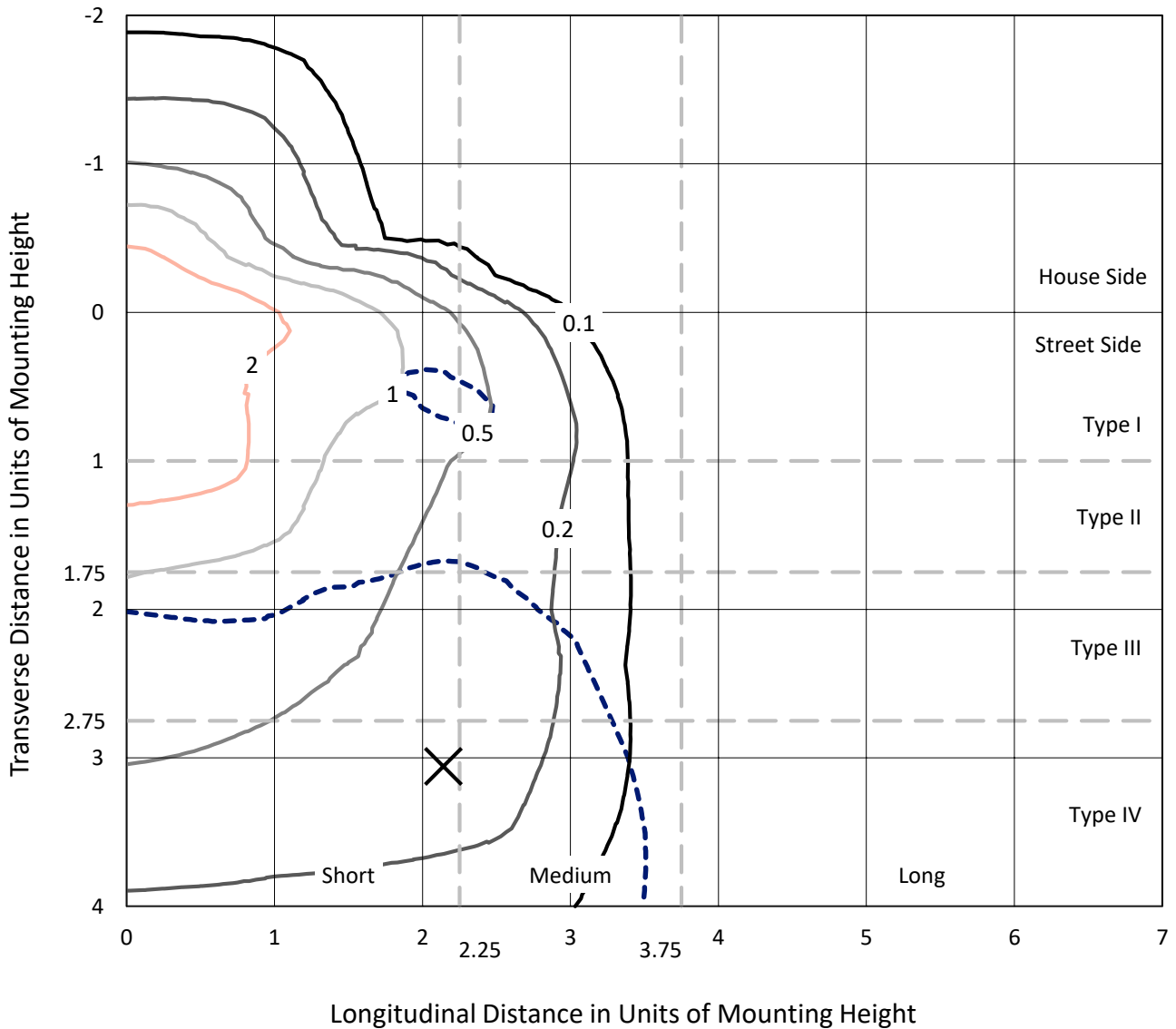
Input Watts (W): 25.31
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

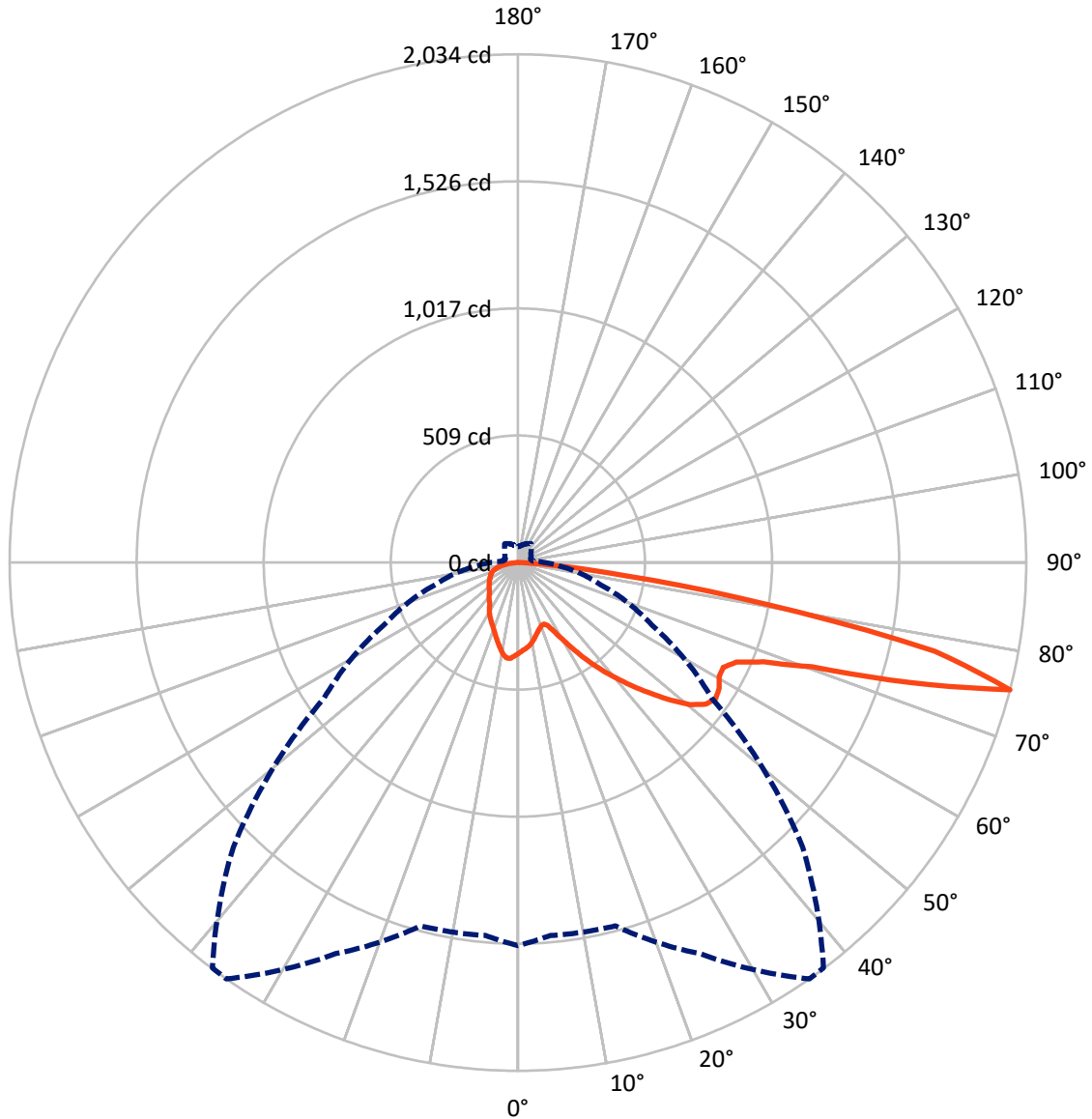
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	485.3	0.0	485.3
	% Fixture	20.1	0.0	20.1
Street Side	Lumens	1932.7	0.0	1932.7
	% Fixture	79.9	0.0	79.9
Total	Lumens	2418.0	0.0	2418.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.1	1.4
10°-20°	90.0	3.7
20°-30°	142.4	5.9
30°-40°	229.8	9.5
40°-50°	339.9	14.1
50°-60°	437.1	18.1
60°-70°	541.2	22.4
70°-80°	545.4	22.6
80°-90°	58.2	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°	2418.0	100.0
0°-180°	2418.0	100.0



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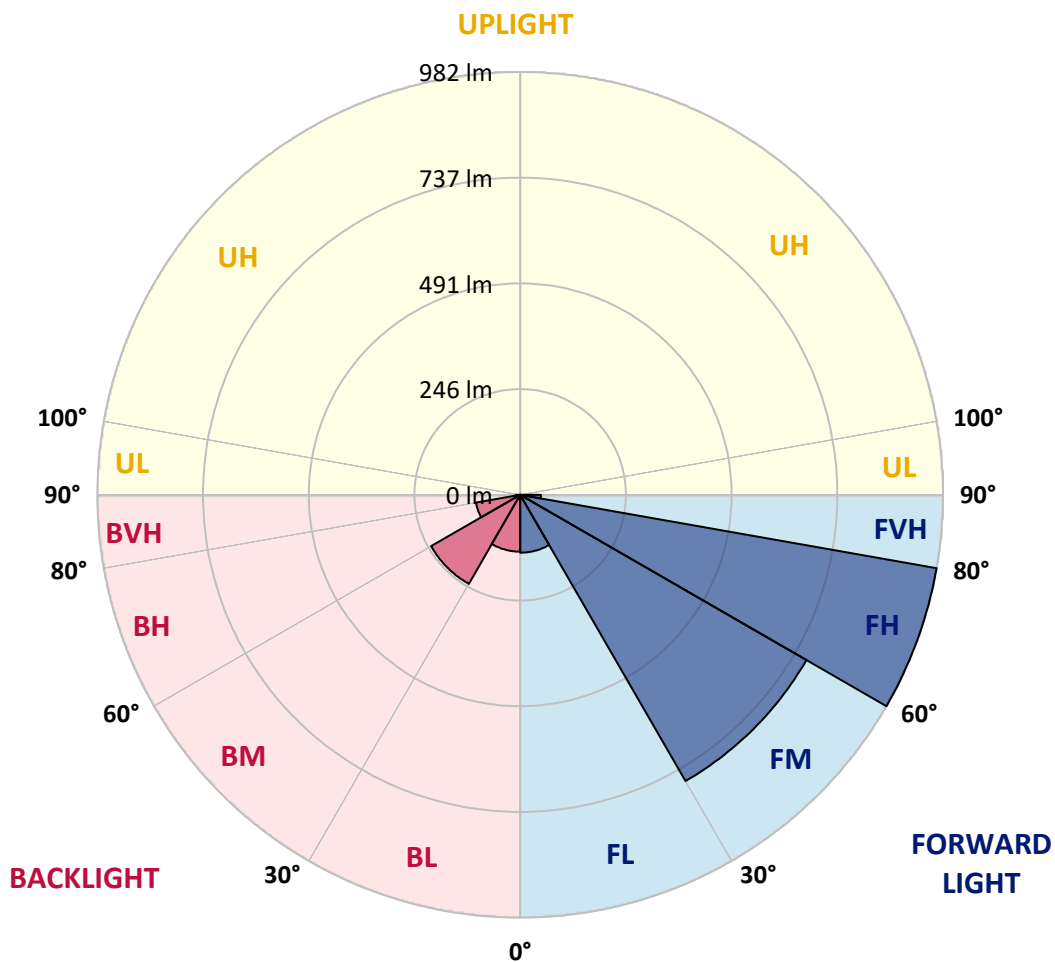
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	134.5	5.6			
FM (30°-60°)	767.8	31.8			
FH (60°-80°)	982.3	40.6			G1/1800
FVH (80°-90°)	48.2	2.0			G1/100
BL (0°-30°)	132.0	5.5	B1/500		
BM (30°-60°)	239.0	9.9	B1/1000		
BH (60°-80°)	104.3	4.3	B0/110		G0/110
BVH (80°-90°)	10.1	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
0°	363.2	363.2	363.2	363.2	363.2	363.2	363.2	363.2	363.2	363.2	363.2
2.5°	352.8	351.9	351.1	351.1	352.8	352.8	353.6	354.4	355.2	357.6	360.8
5°	343.1	342.3	341.4	342.3	344.7	344.7	347.1	348.7	350.3	354.4	358.4
7.5°	330.1	330.1	329.3	332.6	335.0	334.2	337.4	339.0	343.1	347.1	353.6
10°	313.2	313.2	313.2	317.2	321.3	321.3	323.7	327.7	331.0	336.6	344.7
12.5°	298.7	297.9	297.9	301.1	305.9	306.7	310.8	316.4	320.5	327.7	336.6
15°	293.8	292.2	288.2	288.2	290.6	290.6	297.1	305.1	311.6	318.8	329.3
17.5°	294.6	292.2	281.7	278.5	278.5	279.3	285.8	294.6	302.7	311.6	325.3
20°	301.9	297.9	278.5	271.2	269.6	270.4	276.1	284.9	294.6	306.7	322.1
22.5°	333.4	326.9	290.6	274.5	267.2	267.2	270.4	280.1	292.2	308.4	327.7
25°	406.0	395.5	331.0	301.9	280.1	277.7	272.0	281.7	296.2	315.6	343.9
27.5°	480.3	469.8	381.0	349.5	315.6	308.4	287.4	289.8	305.9	331.8	368.1
30°	542.4	533.6	444.0	407.6	362.4	354.4	322.1	306.7	322.9	354.4	404.4
32.5°	547.3	543.3	511.8	474.6	419.7	408.4	365.7	341.4	349.5	385.0	444.0
35°	592.5	589.3	572.3	536.8	481.9	469.0	423.8	386.7	384.2	418.9	489.2
37.5°	636.9	632.9	621.6	597.3	546.5	536.0	500.5	440.7	423.8	458.5	533.6
40°	678.9	673.2	658.7	645.0	607.8	607.8	569.9	492.4	461.7	493.2	570.7
42.5°	756.4	738.6	699.9	689.4	678.9	678.9	623.2	527.9	492.4	531.1	606.2
45°	830.6	813.7	761.2	740.2	745.9	742.6	665.9	548.1	519.8	566.7	640.1
47.5°	889.5	874.2	820.9	806.4	822.5	809.6	701.5	564.2	554.6	604.6	668.4
50°	942.0	905.7	854.0	873.4	893.6	871.8	732.9	588.5	589.3	645.0	709.5
52.5°	870.2	866.1	877.4	922.6	942.0	917.8	761.2	619.1	626.4	696.6	756.4
55°	783.8	783.0	849.2	937.2	960.6	938.0	779.8	656.3	665.1	760.4	815.3
57.5°	766.8	758.8	804.0	906.5	949.3	933.1	789.5	691.0	702.3	841.1	873.4
60°	821.7	806.4	799.1	873.4	925.1	917.0	801.6	732.1	747.5	933.1	927.5
62.5°	941.2	920.2	868.6	875.8	922.6	916.2	830.6	780.6	798.3	1025.2	958.2
65°	1099.4	1084.1	1001.7	942.8	960.6	951.7	883.1	841.9	851.6	1091.3	923.4
67.5°	1273.0	1252.0	1162.4	1081.7	1059.1	1042.1	966.2	914.6	879.9	1081.7	830.6
70°	1469.1	1446.5	1369.0	1285.9	1247.1	1228.6	1111.5	977.5	869.4	975.1	655.5
72.5°	1710.5	1679.8	1637.0	1645.9	1639.4	1587.8	1343.2	998.5	792.7	725.7	391.5
75°	1532.9	1498.2	1505.4	1727.4	2034.2	2031.7	1611.2	946.9	590.9	342.3	169.5
77.5°	549.7	607.8	896.8	1294.0	1705.6	1703.2	1247.1	592.5	253.5	146.1	102.5
80°	138.0	140.5	222.8	531.1	996.1	988.0	707.1	223.6	105.7	88.8	70.2
82.5°	44.4	47.6	81.5	183.2	426.2	416.5	219.6	73.5	66.2	57.3	42.8
85°	14.5	14.5	29.1	63.0	140.5	134.8	44.4	26.6	36.3	29.9	19.4
87.5°	0.0	0.0	0.8	1.6	3.2	1.6	0.0	1.6	4.8	5.7	4.0
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°	363.2	363.2	363.2	363.2	363.2	363.2	363.2	363.2	363.2	363.2	363.2
2.5°	363.2	362.4	365.7	368.1	368.9	371.3	373.7	375.4	374.5	373.7	373.7
5°	362.4	363.2	368.9	373.7	377.8	381.8	385.0	386.7	385.8	385.8	385.8
7.5°	357.6	360.8	367.3	375.4	381.0	383.4	384.2	381.8	380.2	377.8	377.8
10°	349.5	354.4	364.9	373.7	376.2	372.9	368.1	363.2	356.8	352.8	352.8
12.5°	343.1	348.7	361.6	368.9	365.7	357.6	347.1	339.0	332.6	327.7	326.9
15°	337.4	344.7	358.4	360.0	352.8	339.0	325.3	316.4	309.2	305.9	305.9
17.5°	333.4	343.1	355.2	350.3	335.8	318.0	305.1	297.9	292.2	289.0	288.2
20°	334.2	346.3	351.9	338.2	317.2	298.7	286.6	282.5	278.5	276.9	276.9
22.5°	343.1	354.4	351.1	327.7	300.3	279.3	271.2	270.4	268.8	267.2	266.4
25°	362.4	370.5	353.6	317.2	282.5	261.5	257.5	259.9	259.1	257.5	257.5
27.5°	389.1	390.7	357.6	306.7	263.2	244.6	244.6	248.6	247.0	244.6	246.2
30°	421.4	412.5	359.2	289.8	240.5	228.4	230.9	233.3	231.7	228.4	228.4
32.5°	456.1	435.1	359.2	268.0	218.8	213.9	214.7	215.5	212.3	208.3	208.3
35°	490.0	456.9	355.2	242.2	201.8	199.4	198.6	201.8	199.4	193.7	193.7
37.5°	522.3	473.8	344.7	215.5	188.9	188.1	190.5	188.9	185.7	177.6	176.0
40°	544.9	485.1	323.7	193.7	178.4	183.2	181.6	172.7	167.9	162.2	162.2
42.5°	565.0	490.8	297.9	176.8	171.1	177.6	171.1	159.8	153.4	152.6	153.4
45°	583.6	495.6	272.8	163.1	162.2	171.1	163.1	150.9	143.7	143.7	144.5
47.5°	601.4	500.5	247.8	150.1	151.8	161.4	156.6	144.5	137.2	132.4	132.4
50°	629.6	511.8	211.5	136.4	139.6	153.4	151.8	138.0	130.0	122.7	121.1
52.5°	663.5	531.1	171.9	121.9	130.8	146.1	146.1	132.4	123.5	113.8	112.2
55°	708.7	552.1	138.0	111.4	121.9	138.0	140.5	130.0	117.0	108.2	106.6
57.5°	753.9	559.4	111.4	100.9	110.6	130.0	136.4	125.1	109.8	103.3	102.5
60°	785.4	536.0	93.6	92.0	102.5	120.3	130.8	119.5	104.9	98.5	98.5
62.5°	780.6	465.0	83.9	86.4	96.1	113.0	125.9	114.6	101.7	97.7	96.9
65°	712.0	351.1	75.9	81.5	90.4	105.7	121.1	112.2	100.1	96.1	94.4
67.5°	599.8	233.3	70.2	76.7	84.8	100.1	117.0	109.0	95.3	92.8	91.2
70°	434.3	136.4	64.6	71.8	79.1	93.6	111.4	102.5	89.6	88.0	83.9
72.5°	234.9	85.6	58.1	65.4	71.8	85.6	102.5	94.4	82.3	75.9	73.5
75°	107.4	62.2	51.7	58.1	63.0	75.1	92.0	83.1	73.5	65.4	63.8
77.5°	71.8	46.8	43.6	50.0	52.5	63.0	81.5	66.2	57.3	51.7	50.0
80°	49.2	34.7	35.5	41.2	40.4	50.0	61.3	53.3	45.2	46.8	42.8
82.5°	31.5	24.2	27.4	29.1	28.3	37.9	47.6	40.4	33.9	28.3	24.2
85°	13.7	12.9	16.1	17.0	17.0	21.0	25.0	20.2	15.3	11.3	11.3
87.5°	0.8	1.6	1.6	2.4	1.6	0.8	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)