

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: LUMARK

Report Number: P881730

Luminaire Tested: **NAV-SB1B-735-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881730
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-735-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4267 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

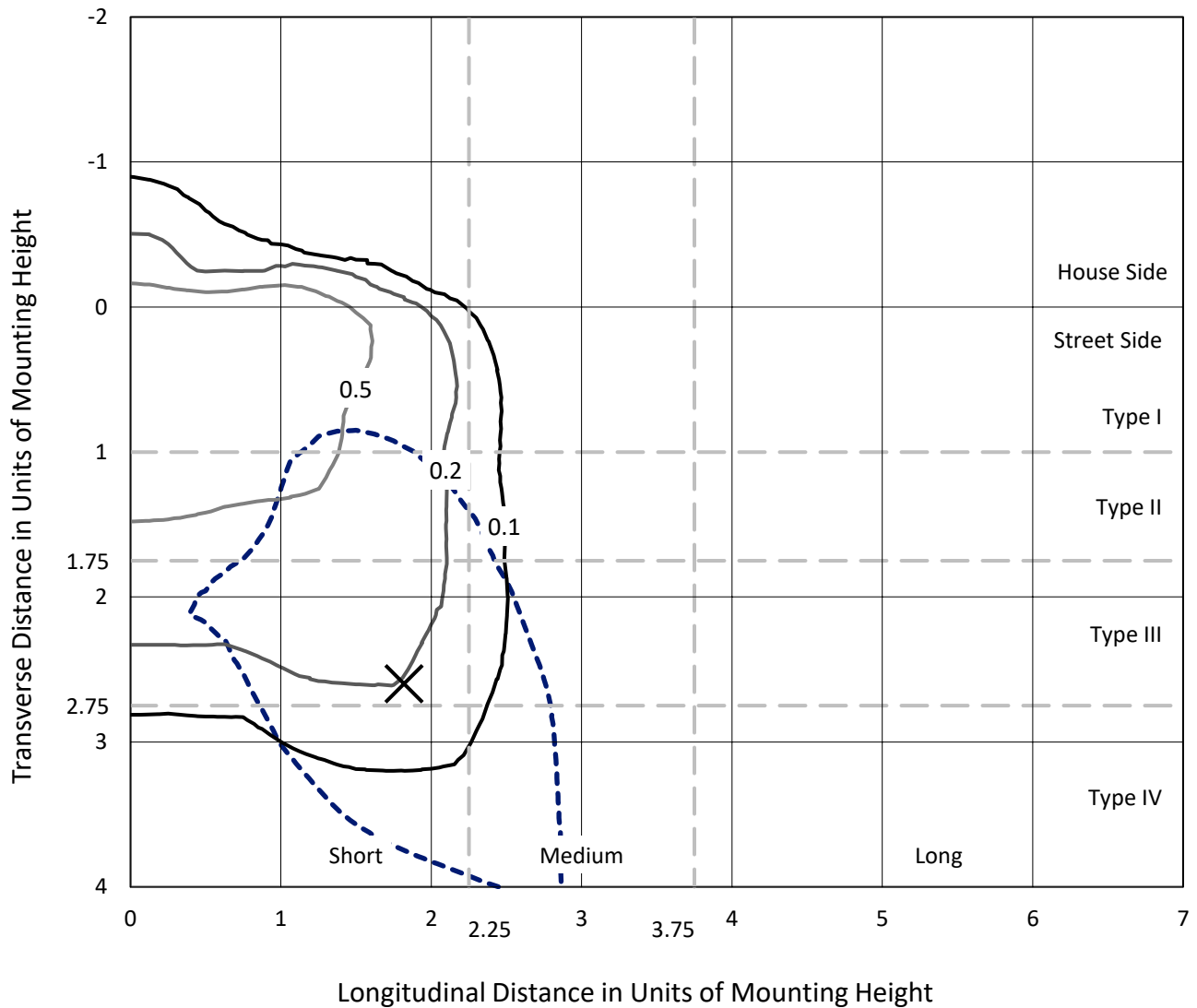
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

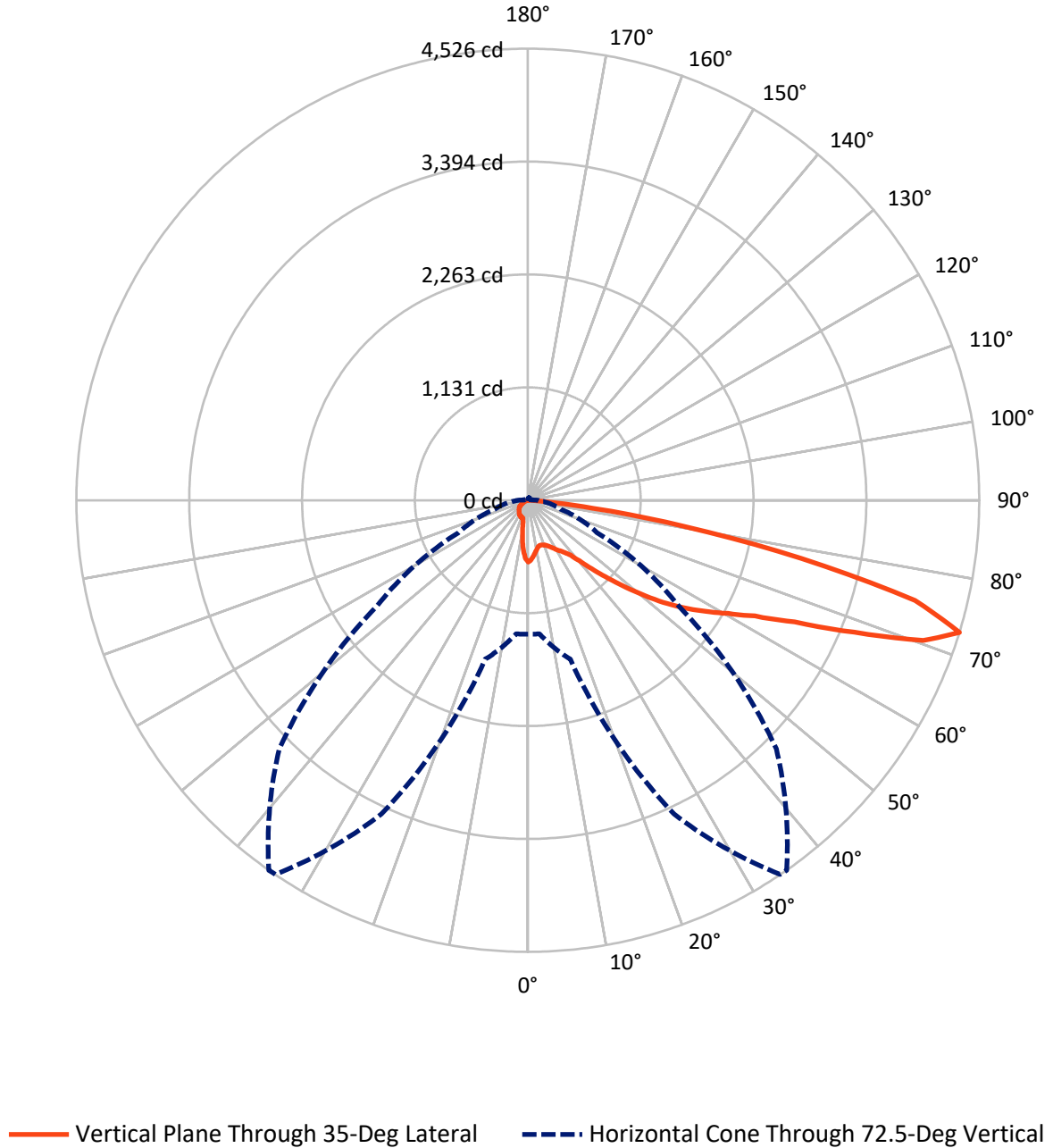
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	480.2	0.0	480.2
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	3786.8	0.0	3786.8
	% Fixture	88.7	0.0	88.7
Total	Lumens	4267.0	0.0	4267.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.8	1.2
10°-20°	118.9	2.8
20°-30°	193.1	4.5
30°-40°	322.2	7.6
40°-50°	609.7	14.3
50°-60°	968.7	22.7
60°-70°	1198.4	28.1
70°-80°	744.9	17.5
80°-90°	60.2	1.4
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°	4267.0	100.0
0°-180°	4267.0	100.0

Coefficient of Utilization



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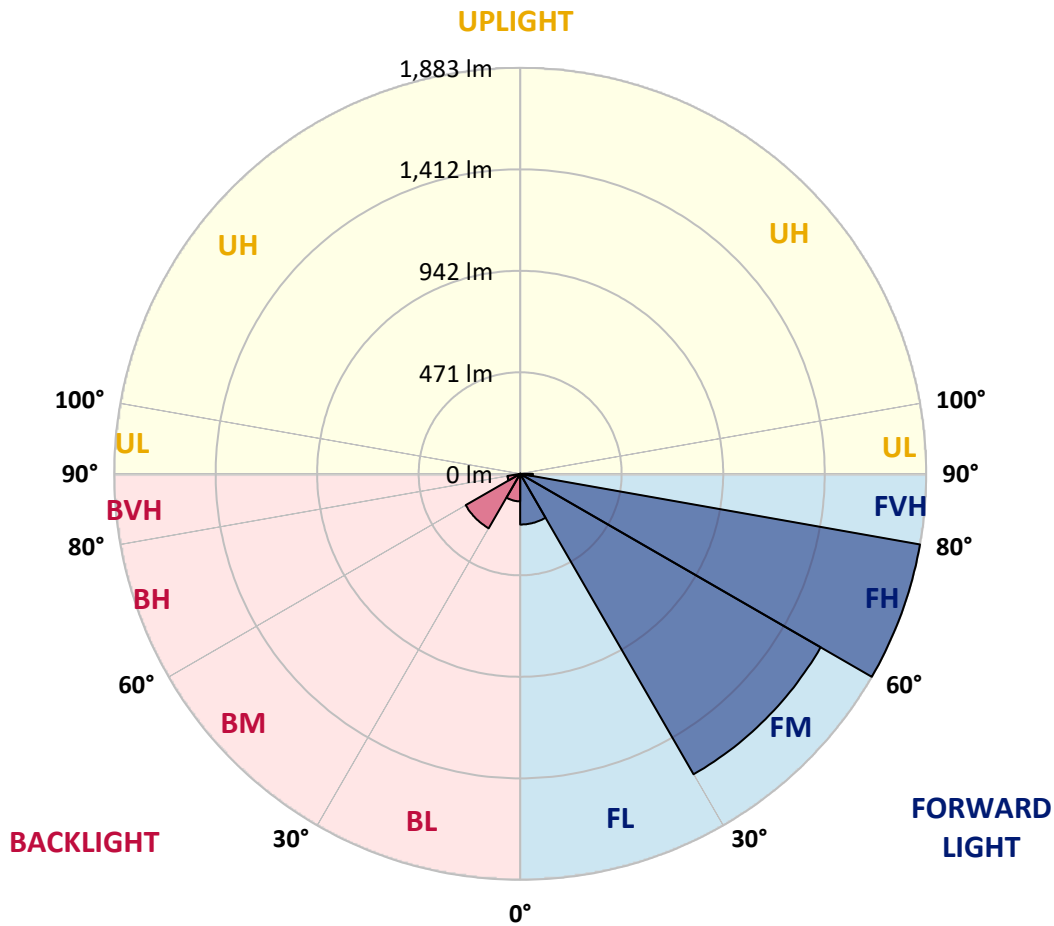
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	235.2	5.5			
FM (30°-60°)	1609.1	37.7			
FH (60°-80°)	1883.1	44.1			G2/5000
FVH (80°-90°)	59.4	1.4			G1/100
BL (0°-30°)	127.6	3.0	B1/500		
BM (30°-60°)	291.5	6.8	B1/1000		
BH (60°-80°)	60.3	1.4	B0/110		G0/110
BVH (80°-90°)	0.8	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-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	618.4	618.4	618.4	618.4	618.4	618.4	618.4	618.4	618.4	618.4	618.4
2.5°	590.9	595.9	596.9	598.4	598.4	600.3	603.4	607.8	615.0	618.7	621.2
5°	544.6	548.4	553.1	556.8	564.0	565.0	577.2	589.0	605.6	618.1	626.9
7.5°	498.1	502.4	508.7	517.8	527.1	530.0	548.4	568.4	594.7	618.1	632.8
10°	465.2	465.5	471.2	480.2	495.2	498.7	521.2	549.6	582.5	614.4	638.4
12.5°	446.8	449.0	451.5	458.4	472.7	474.9	499.0	532.5	570.3	612.2	645.0
15°	446.8	448.3	449.9	453.3	464.9	466.8	488.1	521.5	564.0	613.1	655.6
17.5°	451.5	454.0	452.7	456.8	469.0	470.2	489.0	518.4	563.7	619.1	671.9
20°	462.7	464.6	462.1	464.6	476.8	479.3	498.7	524.3	569.0	629.4	692.2
22.5°	480.6	481.5	475.5	477.4	489.9	493.1	515.6	541.2	581.9	645.9	719.4
25°	503.1	504.9	495.9	498.1	509.9	513.7	539.6	566.5	602.2	668.8	754.1
27.5°	529.0	530.0	522.1	521.8	537.1	542.5	568.7	597.8	629.4	697.5	797.9
30°	558.7	561.5	554.0	552.8	572.2	576.5	602.5	636.3	669.4	740.7	860.1
32.5°	582.2	584.4	580.0	583.1	602.8	606.2	643.4	690.7	732.2	802.0	944.8
35°	615.9	617.2	607.2	612.8	635.3	644.1	699.4	766.9	811.3	878.9	1055.5
37.5°	738.2	738.2	695.7	667.8	689.4	697.2	776.0	862.9	908.9	982.0	1195.0
40°	907.3	904.5	842.3	785.4	782.6	797.9	885.1	983.9	1034.9	1105.9	1351.9
42.5°	1087.7	1083.3	998.6	942.3	933.0	938.3	1011.1	1133.1	1185.0	1256.9	1520.8
45°	1247.8	1246.6	1169.0	1093.4	1076.5	1093.4	1168.4	1307.5	1344.7	1420.4	1689.3
47.5°	1381.9	1381.9	1325.3	1275.9	1267.2	1277.2	1381.3	1501.1	1497.6	1594.5	1853.4
50°	1536.4	1535.1	1481.4	1460.1	1469.2	1483.2	1626.4	1704.9	1655.8	1765.6	2000.1
52.5°	1644.6	1652.1	1633.6	1630.2	1676.5	1700.8	1875.3	1904.4	1797.5	1927.8	2109.8
55°	1730.2	1739.0	1760.2	1784.3	1873.4	1905.3	2116.4	2093.5	1915.9	2068.5	2173.0
57.5°	1851.5	1839.0	1871.9	1919.4	2063.5	2102.0	2349.9	2272.1	2011.3	2182.6	2179.8
60°	1998.8	2000.7	2006.3	2066.3	2253.3	2302.7	2580.0	2440.9	2072.6	2252.7	2103.5
62.5°	2175.8	2178.6	2190.1	2282.4	2508.1	2554.7	2825.1	2579.1	2100.7	2233.0	1906.6
65°	2163.6	2175.5	2304.6	2620.0	2895.5	2941.5	3111.2	2676.0	2058.2	2052.9	1552.3
67.5°	1971.0	1990.4	2206.4	3023.4	3479.5	3530.8	3457.0	2695.1	1874.7	1596.4	1012.7
70°	1718.4	1725.2	1985.0	3386.1	4155.8	4207.7	3766.6	2485.3	1422.6	890.4	453.7
72.5°	1341.9	1343.5	1648.3	3470.2	4522.9	4525.7	3523.6	1845.0	765.1	342.0	157.6
75°	958.6	949.2	1104.0	2814.2	3979.2	4011.0	2641.6	865.4	292.3	161.6	78.5
77.5°	514.0	524.3	624.7	1669.0	2748.9	2803.3	1441.3	249.5	148.8	110.1	51.9
80°	158.8	167.6	256.1	764.1	1557.0	1589.9	534.3	111.0	103.8	78.5	34.1
82.5°	50.0	51.9	119.4	321.1	646.3	661.3	154.8	62.8	71.0	51.9	20.0
85°	14.4	14.7	53.2	119.7	159.8	162.9	43.5	24.4	40.6	32.2	10.3
87.5°	1.6	5.0	20.0	20.0	14.1	13.8	4.7	5.3	11.6	4.1	1.9
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°	618.4	618.4	618.4	618.4	618.4	618.4	618.4	618.4	618.4	618.4	618.4
2.5°	619.7	620.0	615.9	609.1	601.5	595.3	587.5	581.2	576.8	575.6	577.8
5°	624.1	621.9	610.3	589.4	564.3	542.8	518.7	499.6	487.1	481.8	483.7
7.5°	630.6	624.4	599.0	557.8	509.9	467.4	424.3	390.8	369.6	358.9	360.5
10°	636.3	623.7	580.3	512.1	439.0	374.6	316.4	276.1	253.6	242.9	243.2
12.5°	641.6	623.4	555.9	458.0	358.9	280.1	226.0	206.0	199.8	197.6	197.0
15°	651.6	624.4	525.3	396.1	279.2	211.7	192.0	191.7	192.9	192.3	192.0
17.5°	665.3	625.3	490.6	330.5	215.4	186.7	185.7	188.5	190.4	189.5	189.2
20°	683.2	629.1	453.7	265.4	185.1	180.4	182.6	185.1	186.7	185.1	184.8
22.5°	708.2	635.6	413.3	213.2	175.4	176.7	178.5	181.3	182.9	180.7	180.4
25°	738.8	645.9	373.6	185.4	170.7	172.3	175.1	178.2	180.1	177.9	177.6
27.5°	778.5	662.5	337.0	179.2	166.0	167.0	171.0	175.7	178.2	175.4	175.4
30°	836.0	689.7	305.5	182.0	163.2	161.0	166.6	173.2	176.0	173.5	173.2
32.5°	912.3	728.2	286.1	186.3	162.0	154.1	159.5	167.9	172.6	171.0	171.0
35°	1012.4	786.6	278.6	191.3	161.0	146.9	150.7	159.8	167.9	169.5	169.5
37.5°	1133.7	867.9	280.8	193.5	158.2	141.0	142.9	150.7	161.3	166.3	167.6
40°	1271.6	962.7	293.3	191.3	155.1	136.0	136.3	142.3	151.6	159.1	161.6
42.5°	1413.8	1073.3	316.4	183.2	152.3	131.6	130.7	134.8	141.0	146.3	148.5
45°	1549.2	1187.2	339.2	172.0	148.8	127.3	125.1	126.6	127.9	130.1	131.3
47.5°	1667.4	1267.2	332.7	161.6	144.1	122.2	118.5	117.9	114.1	113.8	113.5
50°	1749.0	1284.7	295.5	151.3	137.3	116.6	110.7	106.9	100.4	97.2	97.5
52.5°	1774.9	1215.6	241.4	141.0	126.0	109.1	100.7	94.7	86.6	83.8	83.5
55°	1740.5	1080.2	192.9	128.5	110.4	99.1	89.7	81.9	75.3	71.9	71.9
57.5°	1656.4	907.9	152.6	113.8	93.8	87.9	78.5	70.7	65.0	61.6	61.0
60°	1517.0	721.0	120.7	96.3	80.0	75.7	66.0	61.0	56.0	51.9	51.0
62.5°	1305.3	514.6	94.7	76.3	66.9	61.9	56.3	52.5	46.6	41.0	40.0
65°	1018.6	314.8	73.2	56.0	53.8	51.3	47.8	44.4	37.2	31.6	30.6
67.5°	642.5	149.1	52.2	42.2	42.5	41.3	39.7	36.9	31.6	26.6	26.0
70°	283.0	72.2	34.4	32.2	31.6	31.6	32.8	31.9	26.9	22.2	21.3
72.5°	96.3	38.8	25.6	24.4	22.8	22.5	27.5	26.6	21.6	17.2	16.3
75°	50.3	26.0	18.8	17.5	13.8	16.6	21.9	20.6	15.3	11.3	10.3
77.5°	32.8	18.4	12.8	11.3	7.8	10.9	16.3	14.4	9.1	5.6	5.0
80°	20.6	12.2	7.5	5.3	3.8	5.9	8.8	6.3	3.4	1.3	0.9
82.5°	10.9	6.3	2.8	1.9	1.6	1.9	2.2	1.6	0.6	0.0	0.0
85°	4.4	2.2	0.9	0.6	0.3	0.0	0.6	0.3	0.0	0.0	0.0
87.5°	1.6	0.3	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)