

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: P959831

Luminaire Tested: **NAV-SB1B-735-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959831
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-735-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4807.2 lumens
Efficiency: N/A
Efficacy: 120.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

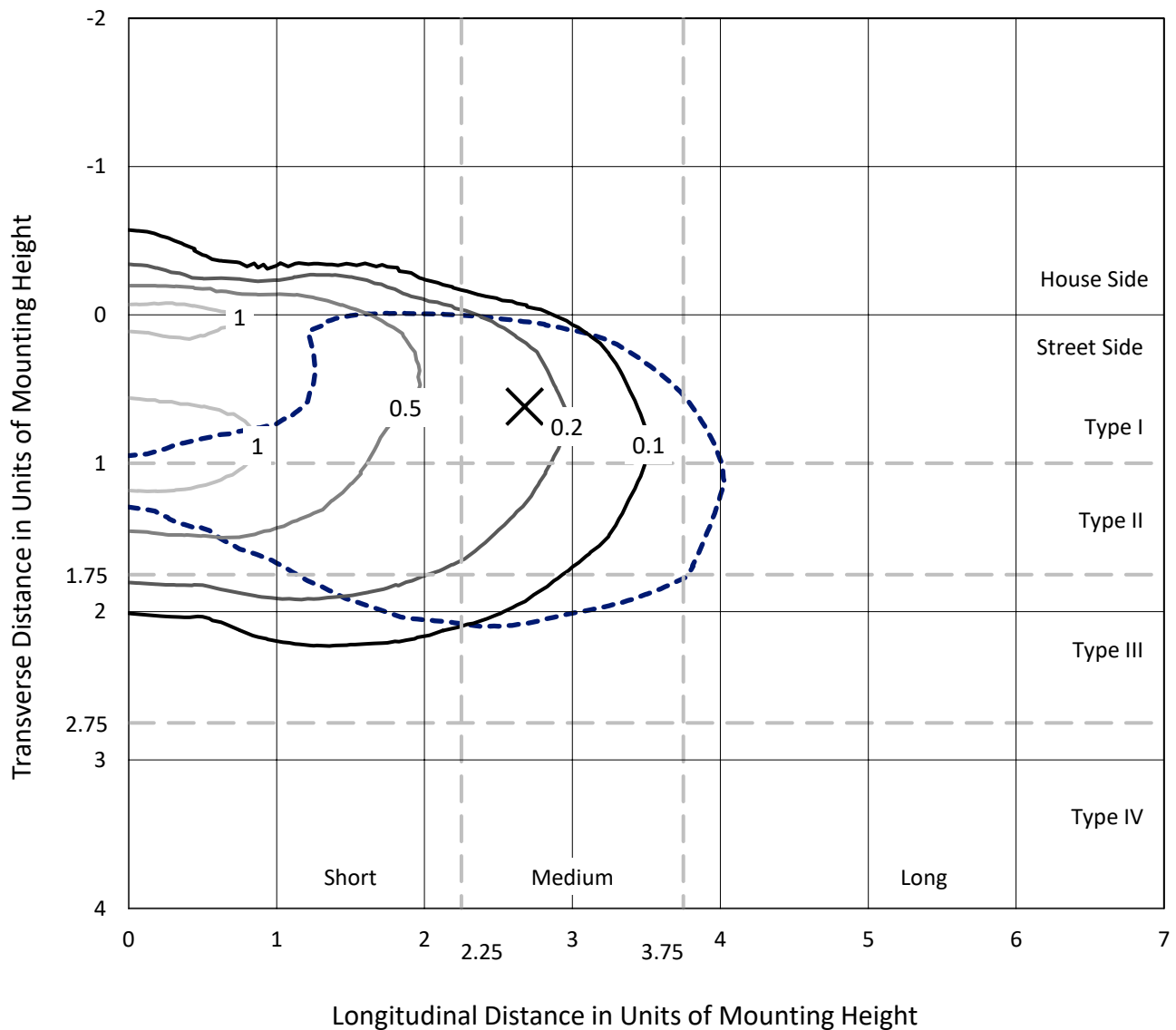
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

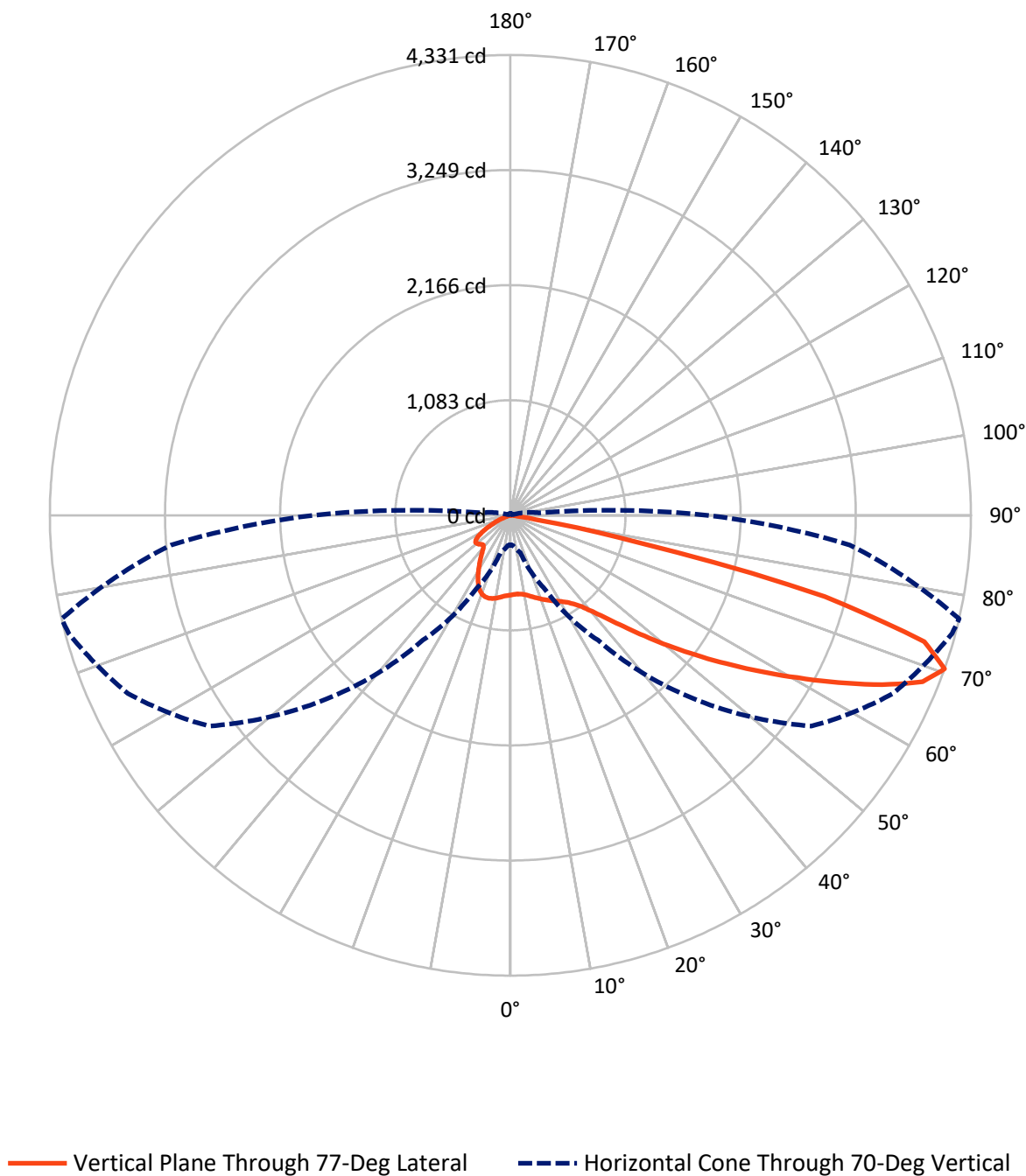
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	506.7	0.0	506.7
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	4300.5	0.0	4300.5
	% Fixture	89.5	0.0	89.5
Total	Lumens	4807.2	0.0	4807.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.6	1.3
10°-20°	153.4	3.2
20°-30°	237.3	4.9
30°-40°	430.6	9.0
40°-50°	812.7	16.9
50°-60°	1174.4	24.4
60°-70°	1250.1	26.0
70°-80°	662.4	13.8
80°-90°	21.8	0.5
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°	4807.2	100.0
0°-180°	4807.2	100.0

Coefficient of Utilization



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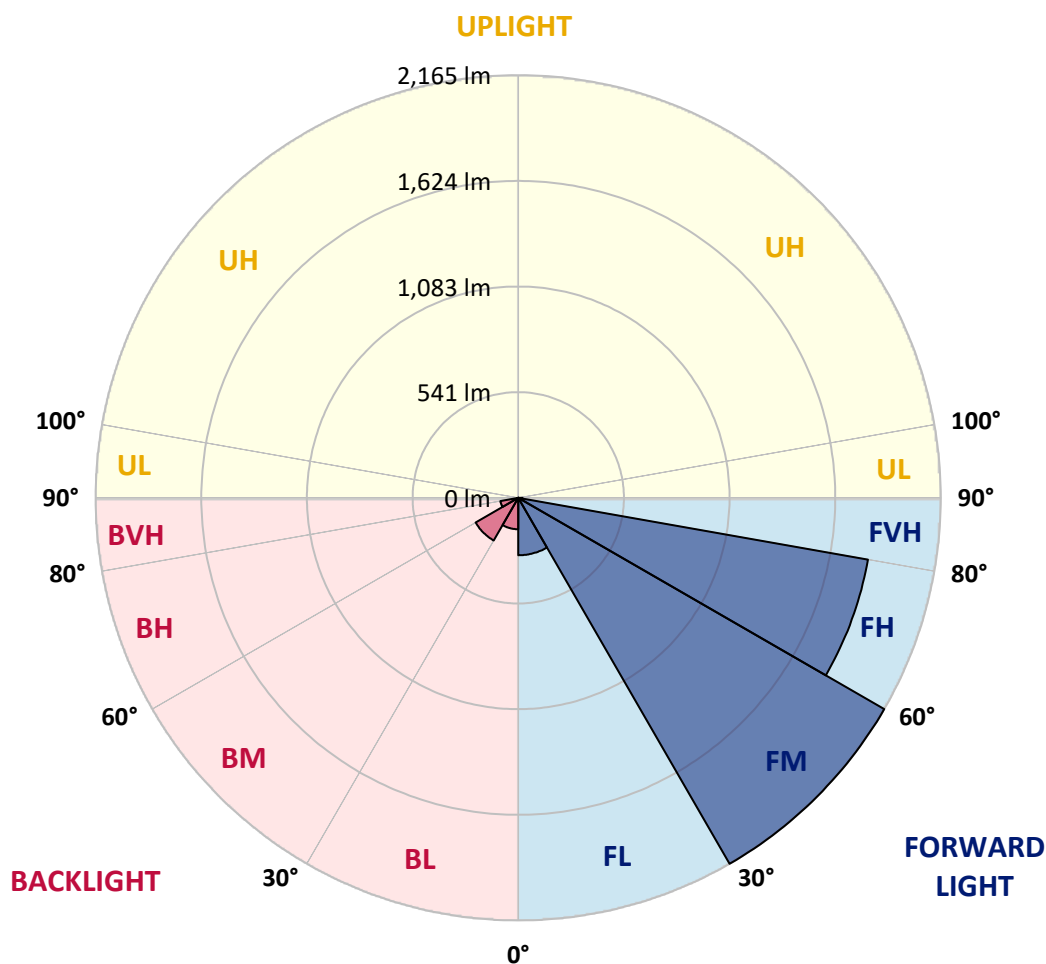
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	294.3	6.1			
FM	(30°-60°)	2165.4	45.0			
FH	(60°-80°)	1819.6	37.9			G2/5000
FVH	(80°-90°)	21.2	0.4			G1/100
BL	(0°-30°)	161.0	3.3	B1/500		
BM	(30°-60°)	252.3	5.2	B1/1000		
BH	(60°-80°)	92.9	1.9	B0/110		G0/110
BVH	(80°-90°)	0.6	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	749.9	749.9	749.9	749.9	749.9	749.9	749.9	749.9	749.9	749.9	749.9
2.5°	704.0	710.4	709.5	713.7	715.2	721.3	727.3	735.5	744.7	744.4	750.4
5°	664.2	670.7	672.1	677.9	685.2	694.6	707.0	723.4	740.5	743.1	755.3
7.5°	617.2	623.8	627.8	639.3	652.7	672.1	692.5	716.5	744.7	748.7	772.0
10°	570.1	576.2	581.4	597.8	619.0	647.8	680.9	715.6	753.5	759.2	792.3
12.5°	541.0	546.7	552.5	566.8	593.2	628.4	673.3	719.8	768.0	776.2	820.0
15°	530.6	535.9	540.4	553.1	577.7	617.8	671.8	728.6	786.6	797.6	853.4
17.5°	532.2	534.9	537.9	547.7	571.6	612.9	674.6	743.7	808.4	818.2	886.7
20°	541.0	542.5	542.8	549.5	570.7	612.3	680.0	758.3	829.1	842.1	919.8
22.5°	552.2	552.8	552.2	556.8	576.5	616.8	687.3	775.9	852.2	864.3	953.2
25°	604.8	593.2	578.6	569.8	586.2	625.7	698.2	799.6	877.3	889.2	985.7
27.5°	767.7	734.6	682.4	623.8	606.3	638.5	713.4	823.6	902.8	913.5	1020.6
30°	1032.5	989.0	900.5	768.3	670.7	665.1	733.2	847.6	929.9	941.4	1058.0
32.5°	1297.9	1287.2	1184.9	1002.1	815.4	724.7	766.0	880.1	965.7	974.8	1108.3
35°	1566.2	1544.6	1460.8	1280.2	1038.5	845.7	820.6	922.6	1012.7	1023.1	1181.8
37.5°	1771.7	1758.6	1706.7	1558.0	1303.3	1032.8	914.1	988.4	1081.1	1092.5	1275.9
40°	1953.2	1947.2	1929.6	1831.5	1599.3	1277.5	1059.5	1090.5	1175.8	1189.4	1391.3
42.5°	2095.9	2110.2	2120.2	2092.8	1904.3	1556.8	1255.0	1233.8	1307.8	1321.8	1538.2
45°	2242.0	2246.8	2287.2	2326.6	2207.3	1848.8	1475.4	1401.6	1472.1	1489.3	1714.3
47.5°	2335.8	2355.1	2426.2	2495.8	2462.0	2138.5	1712.2	1599.8	1662.4	1694.9	1911.6
50°	2342.7	2379.4	2477.2	2598.4	2647.6	2414.1	1969.6	1825.7	1892.3	1928.0	2122.4
52.5°	2226.5	2283.5	2435.0	2612.3	2747.7	2647.6	2235.8	2051.6	2136.9	2183.7	2340.9
55°	1707.0	1781.8	2276.2	2536.5	2751.6	2824.5	2495.2	2286.9	2409.6	2462.4	2577.1
57.5°	1487.3	1524.9	1789.6	2404.6	2678.5	2895.8	2729.5	2510.9	2706.1	2771.7	2800.2
60°	1237.4	1286.9	1500.9	2189.1	2579.2	2902.8	2936.5	2799.9	3027.6	3101.3	3004.9
62.5°	840.9	894.6	1107.5	1818.8	2443.5	2899.5	3106.3	3097.4	3385.0	3464.2	3178.2
65°	520.9	554.6	694.8	1485.1	2253.8	2903.1	3283.8	3458.7	3762.0	3842.4	3312.4
67.5°	411.6	427.1	500.3	1140.2	1926.8	2821.2	3461.1	3798.4	4116.8	4180.6	3353.4
70°	276.5	286.0	364.0	764.4	1433.5	2442.9	3457.7	3969.0	4299.6	4331.4	3203.9
72.5°	145.8	153.0	212.8	353.9	865.8	1736.5	2914.7	3765.0	4117.7	4069.8	2738.6
75°	72.9	85.0	143.3	179.7	369.7	968.4	1809.9	2968.4	3241.0	3055.2	1757.2
77.5°	55.2	66.8	118.4	118.4	128.7	326.1	766.5	1619.0	1493.3	1243.4	515.8
80°	35.3	45.5	103.5	89.6	53.7	82.9	199.8	453.6	317.2	241.4	93.8
82.5°	20.6	29.7	86.2	59.2	30.0	30.6	56.5	96.6	82.3	64.1	28.8
85°	8.2	19.5	59.2	23.4	11.9	7.6	17.0	20.6	17.0	12.7	7.3
87.5°	0.0	4.5	10.4	0.0	0.9	0.6	1.2	1.5	1.5	1.2	2.5
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°	749.9	749.9	749.9	749.9	749.9	749.9	749.9	749.9	749.9	749.9	749.9
2.5°	753.2	753.8	755.6	755.9	751.6	746.2	744.0	743.1	739.5	739.2	739.8
5°	762.3	765.1	762.3	754.4	735.5	709.2	689.1	672.7	657.8	653.3	650.6
7.5°	780.5	783.2	775.0	744.0	696.7	644.2	596.9	563.4	533.4	522.1	517.6
10°	806.6	810.3	784.4	721.9	638.2	553.7	473.6	417.1	373.1	355.2	347.6
12.5°	839.4	840.9	789.7	688.2	561.9	441.4	327.9	267.4	228.3	213.7	209.2
15°	875.6	873.4	790.2	642.4	458.1	312.1	214.0	175.8	160.0	155.1	155.1
17.5°	913.5	904.7	778.1	576.2	344.3	213.4	158.8	149.6	146.9	145.8	145.4
20°	950.8	931.1	755.9	489.6	247.1	159.4	144.2	141.4	139.9	139.3	138.8
22.5°	984.8	951.1	718.0	389.2	179.4	140.8	136.3	133.9	131.1	130.0	129.7
25°	1017.9	962.7	664.5	295.4	143.6	131.7	128.1	123.5	119.9	118.4	117.8
27.5°	1050.1	970.0	597.8	218.5	128.1	123.2	116.5	110.2	107.4	106.9	106.3
30°	1084.3	972.4	521.8	163.0	118.7	112.6	102.9	95.6	94.1	94.4	94.4
32.5°	1126.3	976.0	445.4	133.6	110.8	99.8	88.4	80.8	79.5	80.8	80.5
35°	1176.4	983.3	371.6	123.0	103.8	86.8	74.4	68.0	66.8	67.6	67.4
37.5°	1244.4	995.2	302.7	120.8	98.1	75.8	62.5	57.4	57.4	57.7	57.4
40°	1334.9	1026.7	241.1	119.3	95.0	67.6	52.8	50.7	51.6	52.2	52.2
42.5°	1445.0	1093.8	199.5	117.5	91.6	64.1	48.0	47.0	48.6	49.2	49.2
45°	1568.6	1178.9	184.9	114.5	88.7	66.5	45.8	44.6	46.4	46.7	47.0
47.5°	1696.4	1262.0	183.1	111.1	85.6	70.1	45.2	42.5	44.6	44.9	45.2
50°	1825.7	1316.3	184.9	106.0	80.8	70.1	45.5	40.4	42.2	43.2	43.5
52.5°	1956.0	1341.2	183.7	94.7	72.3	65.9	45.5	38.5	40.4	41.0	41.0
55°	2082.3	1336.4	165.1	78.0	61.3	58.3	44.3	37.0	38.2	38.5	38.5
57.5°	2182.1	1268.6	130.9	60.7	49.8	48.6	40.4	35.3	36.1	35.8	35.8
60°	2234.4	1119.9	93.5	46.7	39.2	38.2	35.6	32.8	33.4	31.9	31.6
62.5°	2234.9	923.2	62.5	37.0	31.3	30.3	30.3	29.4	28.8	25.8	24.9
65°	2187.2	704.9	41.6	29.4	25.2	23.7	25.5	25.2	23.1	18.9	18.2
67.5°	2079.2	462.1	31.6	23.1	19.5	18.6	20.3	21.2	19.8	15.8	15.5
70°	1857.0	269.0	26.1	17.9	14.6	13.6	16.4	18.2	16.4	12.7	12.1
72.5°	1542.5	145.1	21.2	13.3	10.0	9.1	13.0	14.9	13.0	9.4	9.1
75°	1000.9	77.7	16.4	8.8	5.1	5.7	9.7	11.0	9.1	6.0	5.4
77.5°	336.1	34.3	10.4	4.2	2.5	2.5	5.7	6.7	4.2	2.2	1.8
80°	75.0	14.2	4.2	1.8	0.9	0.9	1.2	1.2	0.6	0.0	0.0
82.5°	24.6	5.7	1.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.4	2.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.7	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)