

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: P961964

Luminaire Tested: **NAV-SB2B-740-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961964
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-740-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10339.2 lumens
Efficiency: N/A
Efficacy: 139.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 73.9
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

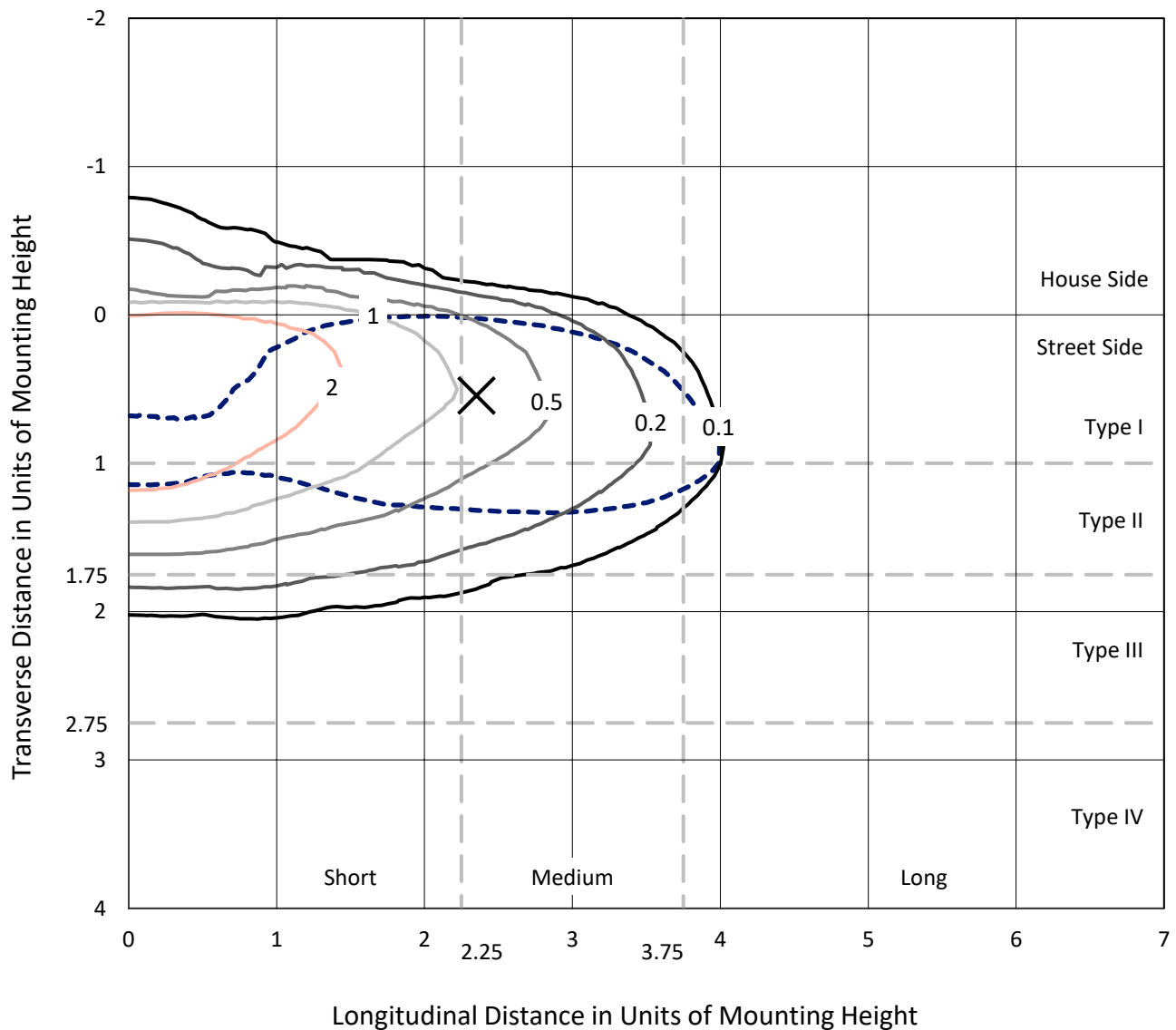


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Iso-Footcandle Lines of Horizontal Illumination

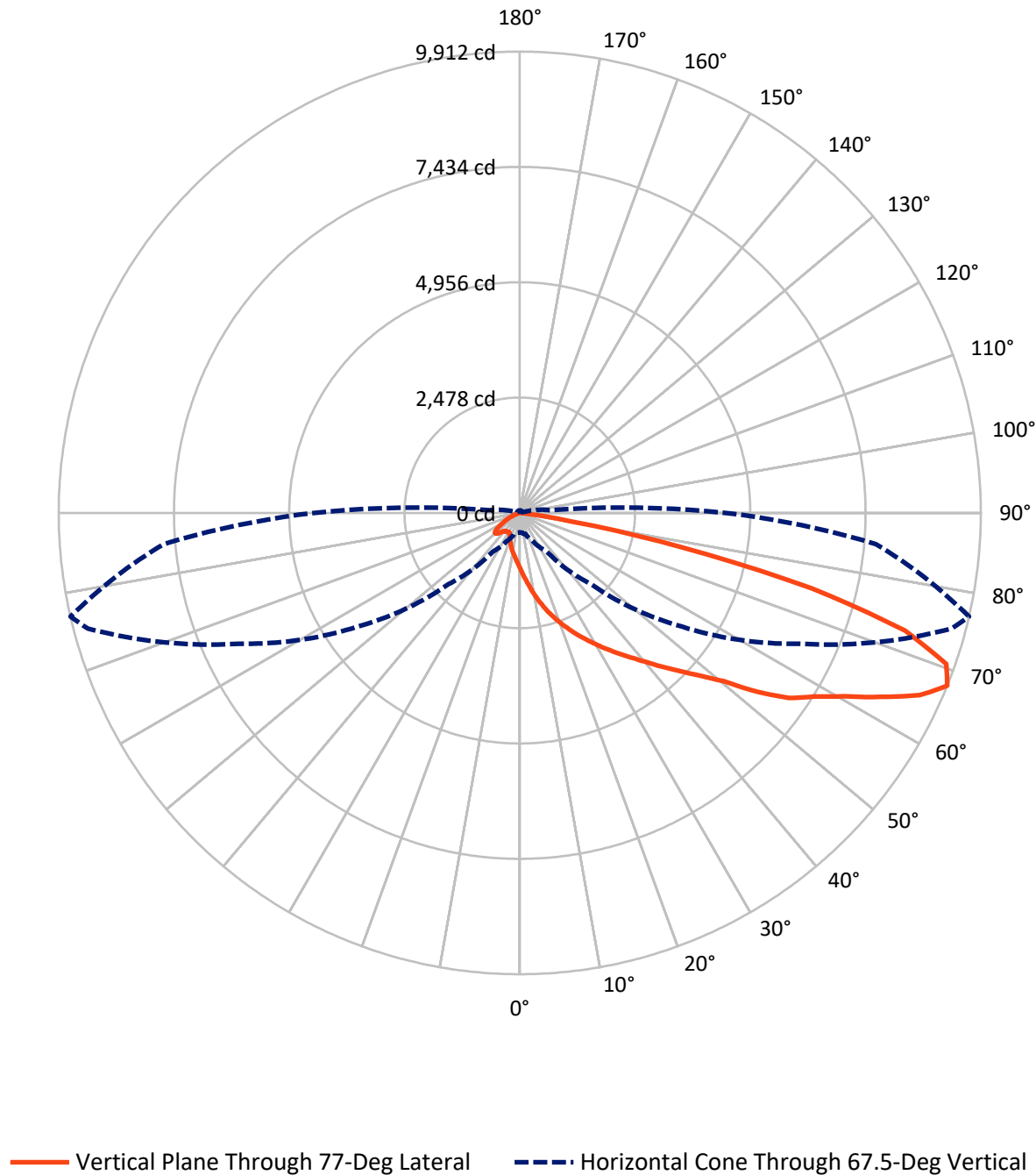
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	760.6	0.0	760.6
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	9578.5	0.0	9578.5
	% Fixture	92.6	0.0	92.6
Total	Lumens	10339.2	0.0	10339.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.7	1.2
10°-20°	426.1	4.1
20°-30°	822.3	8.0
30°-40°	1427.6	13.8
40°-50°	2072.8	20.0
50°-60°	2380.4	23.0
60°-70°	2066.6	20.0
70°-80°	973.4	9.4
80°-90°	48.1	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°	10339.2	100.0
0°-180°	10339.2	100.0

Coefficient of Utilization



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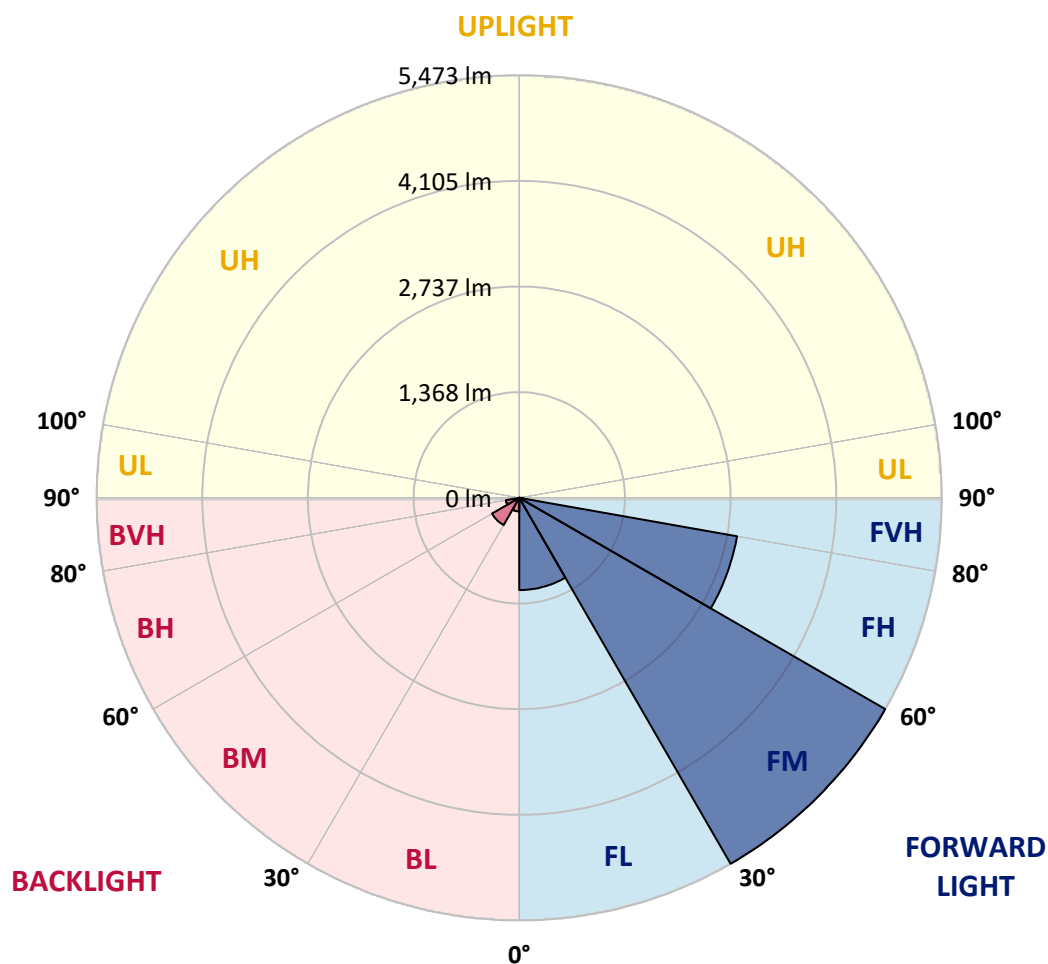
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1194.1	11.5			
FM	(30°-60°)	5473.3	52.9			
FH	(60°-80°)	2863.9	27.7			G2/5000
FVH	(80°-90°)	47.2	0.5			G1/100
BL	(0°-30°)	176.1	1.7	B1/500		
BM	(30°-60°)	407.6	3.9	B1/1000		
BH	(60°-80°)	176.1	1.7	B1/500		G1/500
BVH	(80°-90°)	0.9	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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3
2.5°	1650.7	1660.9	1646.2	1618.0	1575.5	1548.0	1480.5	1417.0	1346.3	1323.9	1253.3
5°	2012.2	2021.1	2004.4	1973.6	1917.2	1863.1	1774.6	1641.6	1503.7	1459.4	1334.1
7.5°	2279.9	2285.0	2278.6	2250.3	2196.4	2135.4	2036.6	1879.2	1674.4	1625.6	1433.7
10°	2472.5	2489.2	2487.3	2476.3	2440.4	2390.9	2285.6	2106.5	1865.7	1802.9	1546.0
12.5°	2600.2	2618.9	2629.7	2654.1	2652.3	2620.8	2528.4	2338.9	2056.5	1982.6	1672.5
15°	2637.5	2657.4	2699.1	2755.6	2805.7	2821.7	2756.9	2566.8	2266.4	2172.0	1802.2
17.5°	2616.3	2647.1	2697.2	2786.5	2896.2	2968.8	2961.7	2787.1	2457.0	2349.2	1929.4
20°	2663.2	2692.7	2731.8	2807.0	2934.8	3066.4	3119.0	2997.6	2646.4	2533.5	2062.8
22.5°	2922.6	2917.5	2921.2	2933.4	3009.8	3140.2	3248.7	3189.0	2833.9	2718.4	2204.1
25°	3333.4	3310.3	3271.2	3205.1	3185.8	3248.7	3361.7	3358.5	3031.6	2907.8	2348.6
27.5°	3804.7	3800.8	3709.1	3549.8	3459.9	3435.5	3489.5	3523.4	3227.5	3095.3	2493.6
30°	4256.0	4266.4	4142.4	3965.2	3800.2	3704.6	3655.8	3680.2	3426.6	3297.5	2643.3
32.5°	4649.0	4659.9	4525.1	4317.7	4113.5	3997.9	3895.2	3834.8	3643.6	3502.9	2807.6
35°	4980.9	4991.9	4837.1	4607.9	4390.3	4285.6	4169.4	4004.4	3861.8	3730.9	2990.6
37.5°	5277.5	5274.3	5067.0	4835.8	4622.0	4539.2	4478.2	4213.1	4086.6	3960.1	3193.5
40°	5452.8	5466.3	5289.1	5034.2	4826.8	4766.5	4762.7	4471.8	4345.9	4223.3	3415.6
42.5°	5504.1	5527.9	5399.5	5190.2	5002.1	4936.6	5037.4	4751.7	4647.7	4528.2	3666.6
45°	5411.7	5434.9	5376.4	5231.3	5121.5	5079.2	5273.6	5041.9	4970.0	4851.8	3949.8
47.5°	5142.0	5170.9	5185.1	5154.2	5153.0	5196.0	5485.6	5347.5	5352.7	5231.9	4277.8
50°	4620.1	4668.9	4798.5	4907.7	5076.6	5288.5	5691.6	5678.8	5784.1	5680.0	4705.5
52.5°	3671.1	3740.5	4187.3	4485.9	4865.4	5271.1	5918.2	6210.4	6541.0	6388.9	5308.4
55°	2950.2	2950.2	3313.5	3872.1	4453.1	5156.8	6017.2	6555.8	7056.6	7020.6	5732.7
57.5°	2405.1	2434.0	2665.7	3159.5	3856.7	4884.6	6078.1	6772.8	7472.0	7445.7	6147.4
60°	1484.4	1546.6	1984.5	2471.8	3178.1	4399.9	6039.6	6992.4	7976.0	7997.2	6647.0
62.5°	835.9	859.1	1054.2	1778.5	2471.2	3748.2	5744.9	7115.0	8620.6	8710.4	7161.9
65°	577.2	588.8	663.9	1106.9	1713.0	2984.2	5169.0	7038.7	9266.5	9448.1	7598.5
67.5°	419.2	425.1	471.9	676.1	1016.4	2163.7	4266.4	6653.4	9608.7	9912.4	7682.0
70°	322.3	326.2	360.2	444.3	600.3	1335.5	3098.5	5887.5	9360.9	9723.7	7254.3
72.5°	262.0	265.8	292.1	328.7	398.1	789.7	1877.9	4781.2	8266.8	8658.5	6175.7
75°	220.9	226.0	249.8	273.5	312.0	507.2	880.9	3329.6	6216.8	6473.6	4294.5
77.5°	122.6	113.0	202.8	226.6	263.2	321.0	412.2	1959.5	3481.7	3553.1	1905.6
80°	76.4	78.9	161.1	182.3	202.2	161.7	188.8	754.4	1207.0	1146.7	369.2
82.5°	4.5	10.2	123.9	131.6	138.7	69.3	71.2	256.1	290.8	267.1	65.5
85°	0.0	0.0	56.5	45.6	48.2	19.9	20.5	59.8	39.2	42.3	12.8
87.5°	0.0	0.0	0.0	1.3	0.0	1.9	3.9	5.1	1.9	2.6	4.5
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°	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3
2.5°	1208.3	1163.4	1072.1	983.0	910.4	843.0	794.9	749.3	726.1	724.9	723.5
5°	1244.9	1150.6	968.2	807.1	677.3	573.4	505.9	457.8	433.4	425.1	423.7
7.5°	1296.3	1154.4	877.0	652.9	500.1	410.9	372.4	357.0	351.9	346.0	344.8
10°	1361.1	1163.4	795.5	525.8	394.2	349.2	333.8	327.5	323.6	319.7	318.5
12.5°	1433.7	1171.7	714.6	436.5	346.7	323.6	312.6	304.9	299.8	295.3	294.1
15°	1504.3	1176.8	630.5	374.3	322.3	303.7	292.1	283.8	276.8	271.6	270.9
17.5°	1574.3	1183.9	551.6	337.0	302.4	283.8	272.2	262.0	256.1	250.4	249.8
20°	1652.0	1182.6	477.0	310.8	282.5	263.8	251.6	242.0	236.3	229.8	229.2
22.5°	1723.8	1176.2	411.5	288.2	262.0	244.0	230.5	220.9	215.0	209.9	209.3
25°	1806.7	1171.1	357.0	267.7	242.7	224.7	209.9	201.0	194.5	190.0	189.4
27.5°	1886.3	1163.4	317.1	249.1	224.1	206.7	192.6	182.3	176.6	173.3	173.3
30°	1964.6	1161.4	302.4	231.1	207.4	190.0	175.9	166.3	161.7	160.5	159.9
32.5°	2059.0	1166.6	308.8	224.7	192.0	174.7	161.1	154.1	149.5	149.5	149.5
35°	2159.8	1165.3	318.5	230.5	181.7	159.2	148.9	144.4	139.9	139.9	139.9
37.5°	2286.3	1167.3	326.2	240.2	177.8	146.4	140.6	134.8	132.2	132.2	132.2
40°	2475.1	1230.8	322.3	248.5	176.6	137.4	125.9	123.9	122.0	122.0	122.0
42.5°	2706.2	1368.8	327.5	249.1	175.9	131.0	115.5	119.4	114.9	114.3	113.7
45°	2959.2	1519.7	360.2	235.6	175.3	127.7	110.4	114.9	107.8	107.8	107.8
47.5°	3210.2	1669.3	393.6	216.4	173.3	127.1	106.0	103.3	101.5	102.1	102.1
50°	3556.2	1791.3	406.4	190.0	168.8	125.9	97.6	98.2	97.0	98.2	98.2
52.5°	3933.1	1816.9	391.0	160.5	156.0	122.0	91.8	94.4	93.8	95.0	95.0
55°	4168.1	1789.3	323.0	133.6	136.1	106.6	86.0	91.1	91.1	91.1	91.1
57.5°	4410.8	1671.9	229.2	108.5	113.0	87.3	80.9	87.9	87.3	86.7	86.7
60°	4585.4	1481.8	150.9	89.3	89.9	72.0	75.1	82.8	82.2	78.9	78.9
62.5°	4715.7	1271.8	97.0	75.7	68.7	64.9	68.7	75.1	72.6	65.5	64.2
65°	4701.0	981.0	74.5	64.9	56.5	56.5	59.8	65.5	57.8	46.2	44.9
67.5°	4426.9	663.9	61.6	54.5	47.6	46.8	49.4	54.5	49.4	39.2	37.9
70°	3936.9	434.0	49.4	42.3	37.9	34.6	39.8	46.8	41.7	31.5	30.1
72.5°	3195.4	264.6	37.2	30.9	27.6	22.4	31.5	38.5	33.4	23.1	21.8
75°	2067.3	134.8	25.7	19.9	14.8	13.5	23.1	28.9	23.1	14.1	12.2
77.5°	791.0	56.5	14.1	9.0	7.7	6.5	12.8	17.3	9.6	3.2	2.6
80°	152.2	23.8	7.1	4.5	3.9	2.6	1.9	1.3	0.0	0.0	0.0
82.5°	26.3	7.7	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.2	0.0	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)