

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: P964692

Luminaire Tested: **NAV-SB3C-827-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964692
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-SB3C-827-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 615mA 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: 16956.6 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

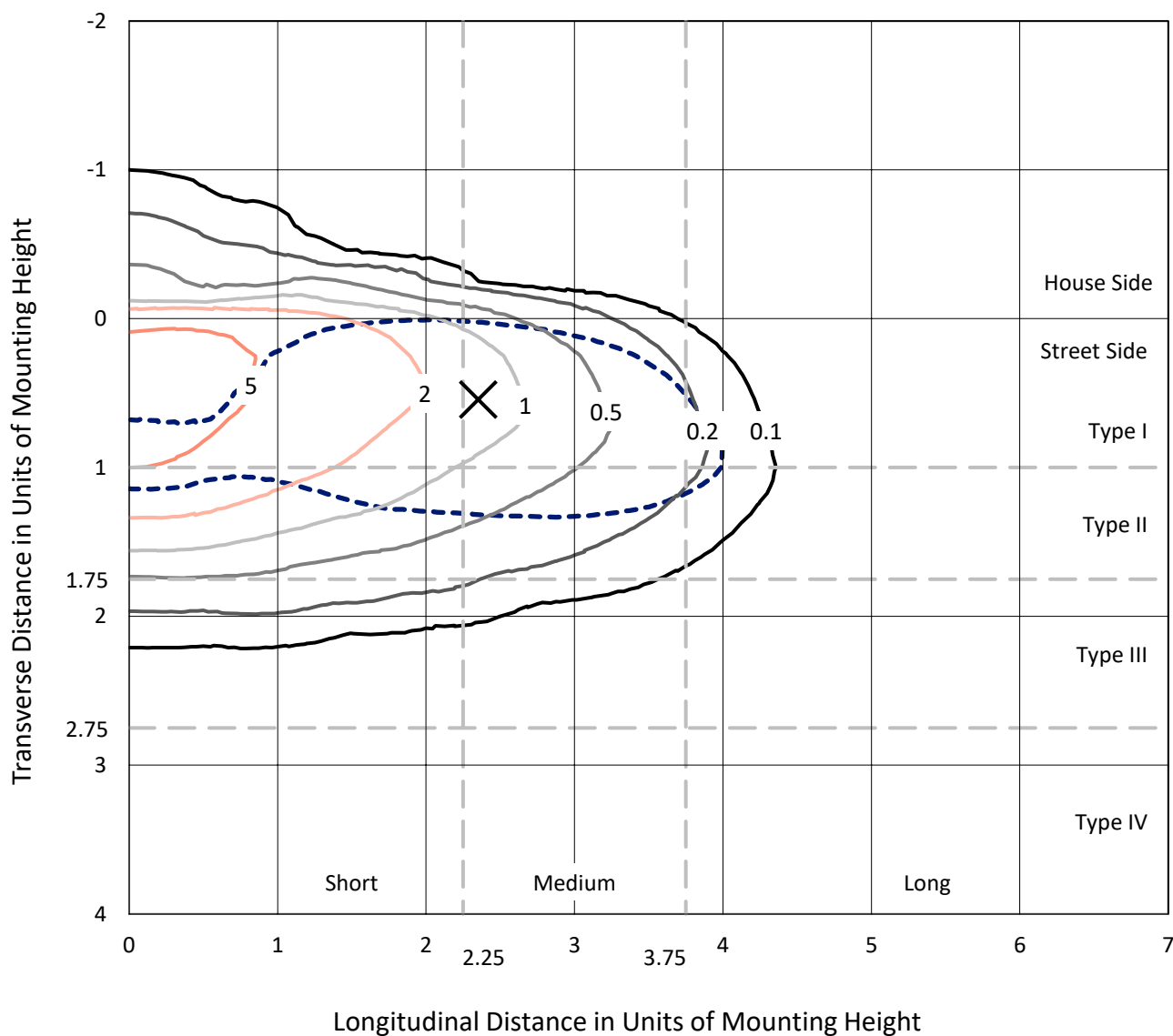
Input Watts (W): 149.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

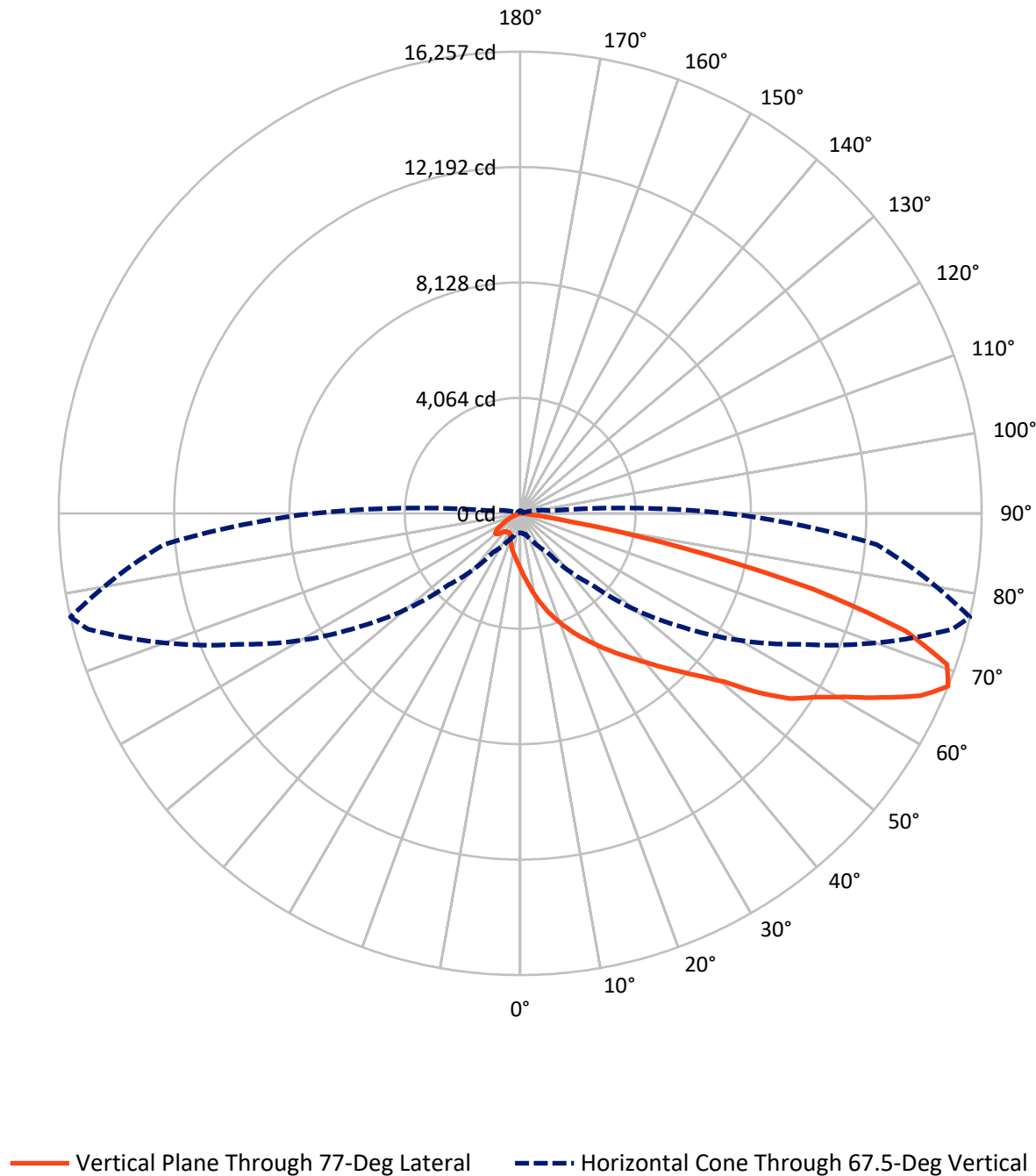
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 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	1247.5	0.0	1247.5
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	15709.1	0.0	15709.1
	% Fixture	92.6	0.0	92.6
Total	Lumens	16956.6	0.0	16956.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.6	1.2
10°-20°	698.9	4.1
20°-30°	1348.7	8.0
30°-40°	2341.4	13.8
40°-50°	3399.5	20.0
50°-60°	3903.9	23.0
60°-70°	3389.3	20.0
70°-80°	1596.4	9.4
80°-90°	79.0	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°	16956.6	100.0
0°-180°	16956.6	100.0

Coefficient of Utilization



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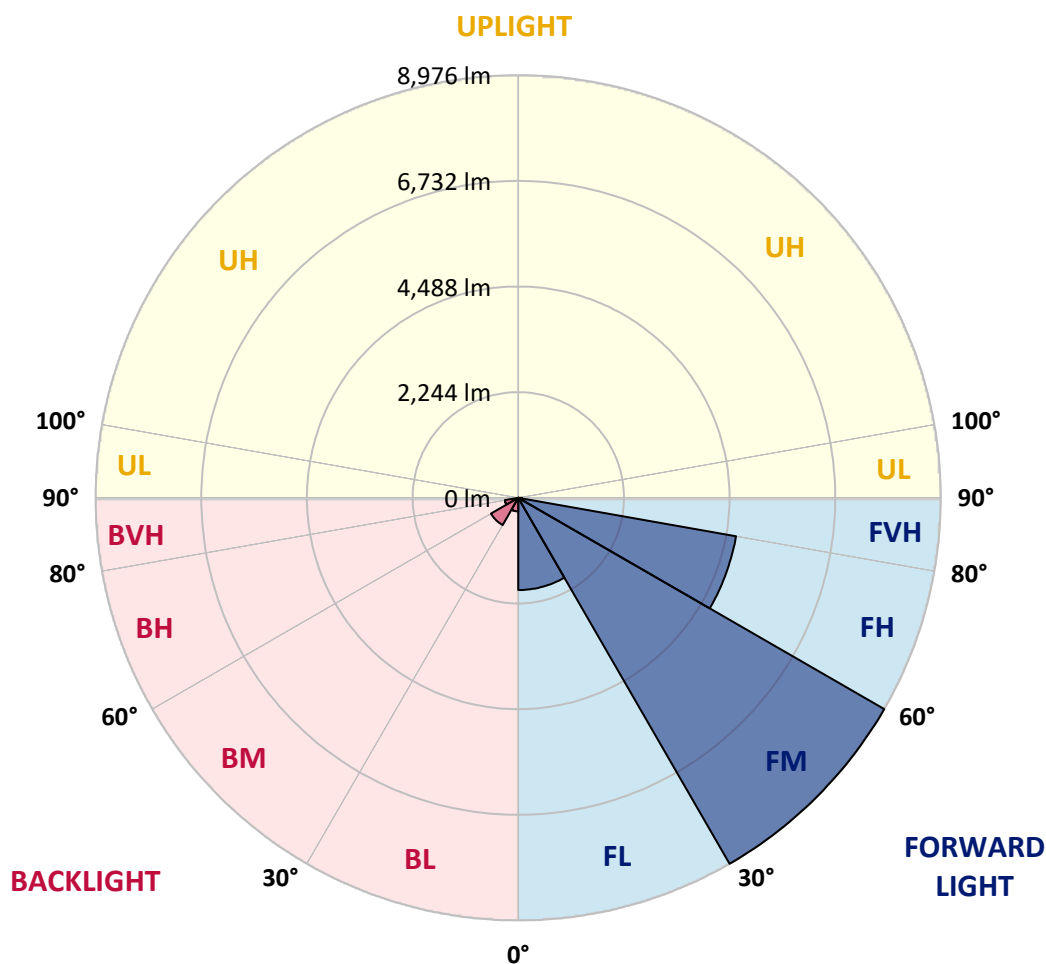
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1958.3	11.5			
FM	(30°-60°)	8976.3	52.9			
FH	(60°-80°)	4696.9	27.7			G2/5000
FVH	(80°-90°)	77.5	0.5			G1/100
BL	(0°-30°)	288.8	1.7	B1/500		
BM	(30°-60°)	668.4	3.9	B1/1000		
BH	(60°-80°)	288.8	1.7	B1/500		G1/500
BVH	(80°-90°)	1.5	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°	1955.4	1955.4	1955.4	1955.4	1955.4	1955.4	1955.4	1955.4	1955.4	1955.4	1955.4
2.5°	2707.1	2724.0	2699.7	2653.4	2583.9	2538.7	2428.1	2323.9	2208.1	2171.2	2055.3
5°	3300.0	3314.7	3287.4	3236.7	3144.1	3055.7	2910.4	2692.4	2466.0	2393.4	2188.1
7.5°	3739.1	3747.5	3736.9	3690.6	3602.2	3502.1	3340.0	3082.0	2746.1	2666.1	2351.2
10°	4054.9	4082.3	4079.2	4061.3	4002.3	3921.2	3748.5	3454.8	3059.9	2956.7	2535.5
12.5°	4264.5	4295.1	4312.9	4353.0	4349.8	4298.1	4146.5	3836.0	3372.7	3251.5	2743.0
15°	4325.5	4358.2	4426.7	4519.3	4601.4	4627.8	4521.4	4209.7	3717.0	3562.2	2955.7
17.5°	4290.8	4341.4	4423.5	4569.9	4749.8	4868.9	4857.3	4570.9	4029.7	3852.8	3164.2
20°	4367.6	4416.1	4480.4	4603.5	4813.1	5029.0	5115.3	4916.3	4340.3	4154.9	3383.1
22.5°	4793.1	4784.6	4791.0	4810.9	4936.3	5150.0	5328.0	5230.1	4647.8	4458.2	3614.8
25°	5466.9	5429.0	5364.8	5256.4	5224.7	5328.0	5513.3	5508.0	4972.1	4768.8	3851.7
27.5°	6239.8	6233.5	6083.0	5821.8	5674.4	5634.4	5722.8	5778.6	5293.2	5076.3	4089.6
30°	6980.0	6996.9	6793.7	6503.1	6232.4	6075.6	5995.5	6035.5	5619.7	5408.0	4335.0
32.5°	7624.5	7642.4	7421.2	7081.1	6746.3	6556.7	6388.3	6289.3	5975.5	5744.9	4604.6
35°	8168.8	8186.8	7933.0	7557.1	7200.1	7028.5	6837.9	6567.3	6333.6	6118.7	4904.7
37.5°	8655.3	8650.1	8310.0	7930.8	7580.3	7444.4	7344.3	6909.5	6702.1	6494.6	5237.4
40°	8942.8	8964.9	8674.3	8256.3	7916.2	7817.2	7810.8	7333.9	7127.4	6926.3	5601.7
42.5°	9027.0	9065.9	8855.4	8512.1	8203.6	8096.2	8261.5	7793.0	7622.3	7426.5	6013.5
45°	8875.4	8913.3	8817.5	8579.5	8399.5	8330.0	8648.9	8268.9	8150.9	7957.2	6477.8
47.5°	8433.2	8480.5	8503.7	8453.2	8451.0	8521.5	8996.4	8770.1	8778.5	8580.6	7015.8
50°	7577.1	7657.1	7869.8	8048.8	8325.8	8673.2	9334.5	9313.5	9486.1	9315.5	7717.1
52.5°	6020.8	6134.5	6867.4	7357.0	7979.3	8644.7	9706.1	10185.2	10727.5	10478.0	8705.8
55°	4838.3	4838.3	5434.3	6350.4	7303.3	8457.4	9868.3	10751.7	11573.1	11514.1	9401.8
57.5°	3944.4	3991.8	4371.8	5181.6	6325.1	8010.9	9968.3	11107.6	12254.3	12211.1	10082.1
60°	2434.5	2536.6	3254.7	4053.9	5212.1	7215.9	9905.2	11467.8	13080.8	13115.6	10901.3
62.5°	1370.9	1408.9	1729.0	2916.7	4052.8	6147.1	9421.9	11668.9	14138.0	14285.5	11745.8
65°	946.6	965.6	1088.8	1815.3	2809.3	4894.2	8477.4	11543.6	15197.4	15495.3	12461.7
67.5°	687.6	697.1	773.9	1108.7	1666.9	3548.4	6996.9	10911.8	15758.6	16256.6	12598.7
70°	528.6	534.9	590.7	728.7	984.5	2190.1	5081.5	9655.6	15352.1	15947.1	11897.4
72.5°	429.6	435.9	479.1	539.2	652.8	1295.1	3079.9	7841.4	13557.9	14200.1	10128.4
75°	362.2	370.6	409.6	448.5	511.8	831.8	1444.6	5460.7	10195.8	10616.9	7043.2
77.5°	201.1	185.3	332.7	371.7	431.7	526.4	676.0	3213.6	5710.2	5827.0	3125.2
80°	125.3	129.6	264.2	299.0	331.7	265.4	309.5	1237.2	1979.6	1880.6	605.5
82.5°	7.4	16.8	203.3	215.9	227.4	113.7	116.8	420.1	477.0	438.0	107.4
85°	0.0	0.0	92.7	74.7	78.9	32.6	33.7	97.9	64.3	69.5	21.0
87.5°	0.0	0.0	0.0	2.2	0.0	3.2	6.4	8.4	3.2	4.2	7.4
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°	1955.4	1955.4	1955.4	1955.4	1955.4	1955.4	1955.4	1955.4	1955.4	1955.4	1955.4
2.5°	1981.6	1907.9	1758.5	1612.1	1493.1	1382.5	1303.6	1228.8	1190.8	1188.8	1186.6
5°	2041.7	1886.9	1587.8	1323.6	1110.9	940.3	829.7	750.7	710.7	697.1	694.9
7.5°	2126.0	1893.2	1438.4	1070.8	820.2	673.9	610.7	585.5	577.0	567.5	565.4
10°	2232.2	1907.9	1304.6	862.3	646.5	572.8	547.6	537.0	530.6	524.4	522.2
12.5°	2351.2	1921.7	1172.0	716.0	568.6	530.6	512.8	500.2	491.7	484.3	482.3
15°	2467.1	1930.1	1034.0	613.9	528.6	498.0	479.1	465.5	453.9	445.4	444.3
17.5°	2581.9	1941.7	904.5	552.8	495.9	465.5	446.5	429.6	420.1	410.6	409.6
20°	2709.3	1939.5	782.4	509.6	463.3	432.8	412.8	397.0	387.4	377.0	375.9
22.5°	2827.2	1929.0	675.0	472.7	429.6	400.2	378.0	362.2	352.7	344.3	343.3
25°	2963.1	1920.6	585.5	439.1	398.0	368.5	344.3	329.5	319.1	311.7	310.6
27.5°	3093.6	1907.9	520.2	408.6	367.5	339.1	315.9	299.0	289.6	284.3	284.3
30°	3222.1	1904.8	495.9	379.0	340.1	311.7	288.5	272.8	265.4	263.2	262.2
32.5°	3376.9	1913.3	506.5	368.5	314.9	286.4	264.2	252.7	245.4	245.4	245.4
35°	3542.2	1911.1	522.2	378.0	298.0	261.2	244.3	236.9	229.5	229.5	229.5
37.5°	3749.6	1914.3	534.9	393.8	291.7	240.1	230.6	221.1	216.9	216.9	216.9
40°	4059.1	2018.5	528.6	407.5	289.6	225.3	206.3	203.3	200.1	200.1	200.1
42.5°	4438.2	2245.0	537.0	408.6	288.5	214.8	189.5	195.9	188.5	187.5	186.3
45°	4853.1	2492.4	590.7	386.4	287.4	209.5	181.1	188.5	176.9	176.9	176.9
47.5°	5264.8	2737.7	645.4	354.9	284.3	208.5	173.7	169.5	166.4	167.4	167.4
50°	5832.4	2937.8	666.6	311.7	277.0	206.3	160.0	161.1	159.0	161.1	161.1
52.5°	6450.4	2979.9	641.2	263.2	255.8	200.1	150.6	154.8	153.8	155.8	155.8
55°	6835.8	2934.6	529.6	219.0	223.2	174.8	141.1	149.5	149.5	149.5	149.5
57.5°	7233.8	2741.9	375.9	177.9	185.3	143.2	132.6	144.2	143.2	142.2	142.2
60°	7520.2	2430.3	247.4	146.4	147.4	118.0	123.2	135.8	134.8	129.6	129.6
62.5°	7733.9	2085.9	159.0	124.2	112.6	106.4	112.6	123.2	119.0	107.4	105.3
65°	7709.7	1608.9	122.2	106.4	92.7	92.7	97.9	107.4	94.8	75.8	73.7
67.5°	7260.2	1088.8	101.1	89.5	77.9	76.9	81.1	89.5	81.1	64.3	62.1
70°	6456.8	711.8	81.1	69.5	62.1	56.9	65.3	76.9	68.5	51.6	49.5
72.5°	5240.6	433.8	61.1	50.5	45.3	36.9	51.6	63.1	54.7	37.9	35.8
75°	3390.5	221.1	42.1	32.6	24.2	22.1	37.9	47.4	37.9	23.2	20.0
77.5°	1297.2	92.7	23.2	14.8	12.6	10.6	21.0	28.4	15.8	5.2	4.2
80°	249.6	38.9	11.6	7.4	6.4	4.2	3.2	2.2	0.0	0.0	0.0
82.5°	43.2	12.6	4.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.8	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.2	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)