

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: P833328

Luminaire Tested: **TTN-D1-830-U-RW-CG-UPL3**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833328
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TTN-D1-830-U-RW-CG-UPL3
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND RECTANGULAR DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3495.7 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B2 - U4 - G2

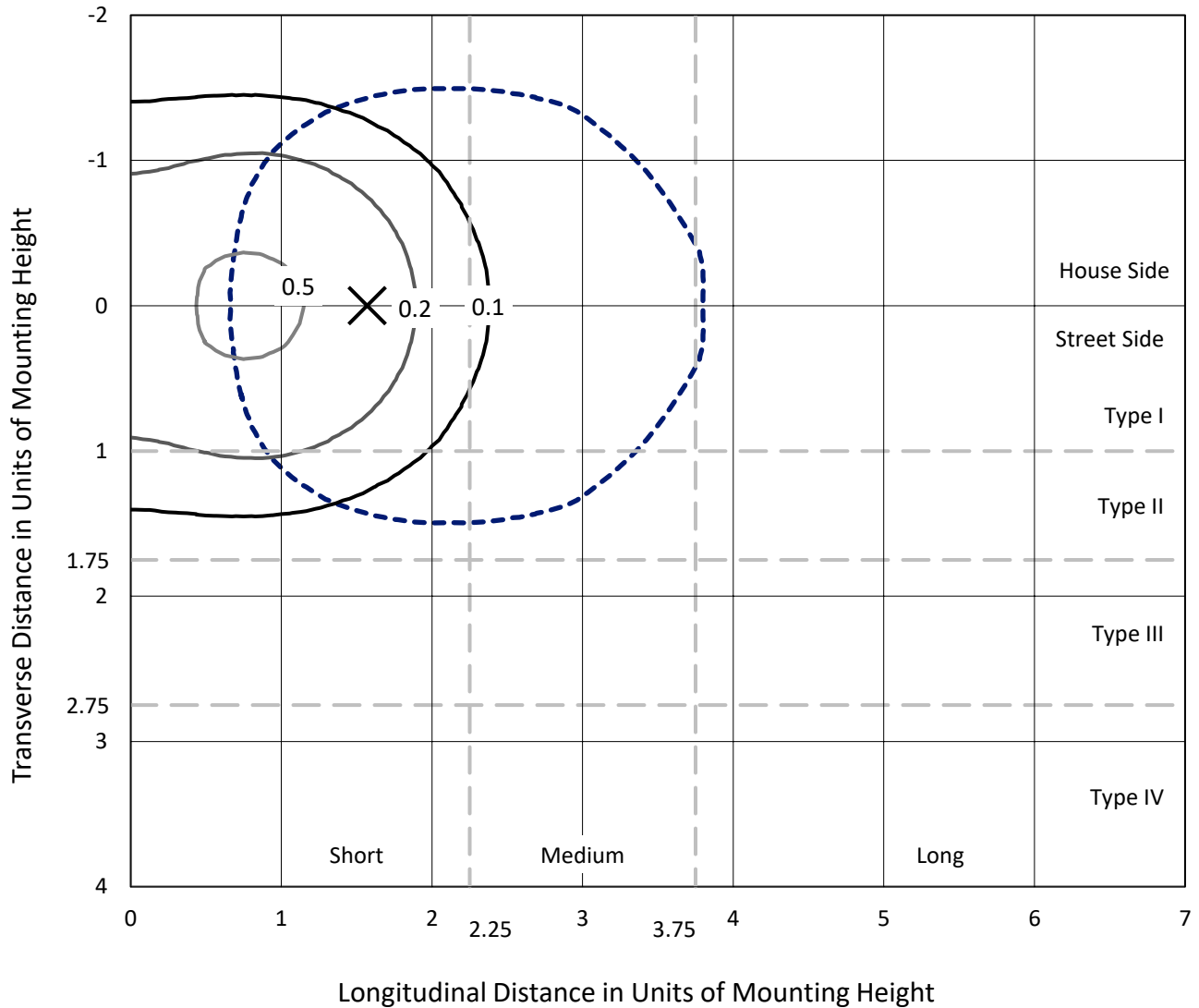
Input Watts (W): 33.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

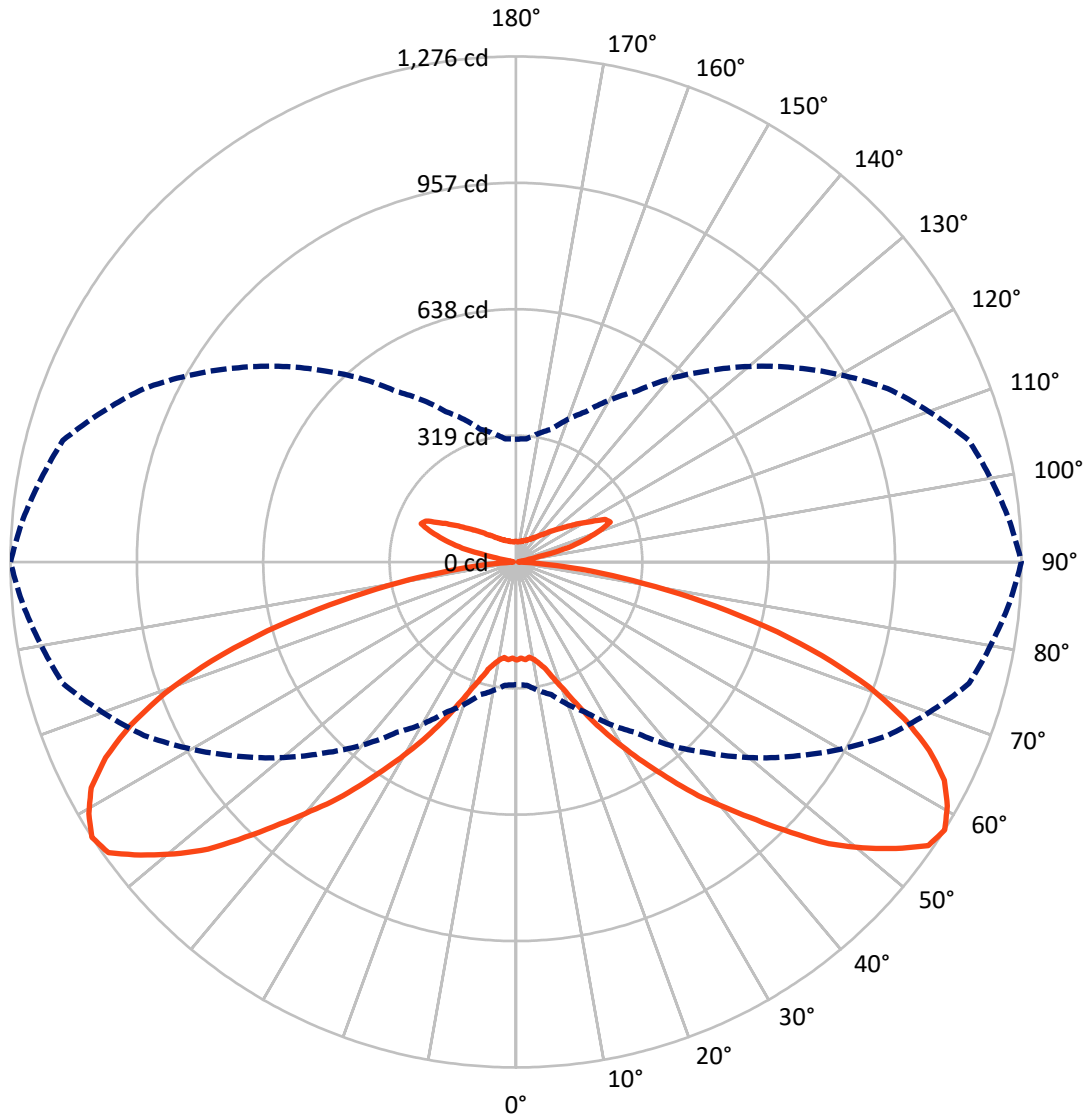
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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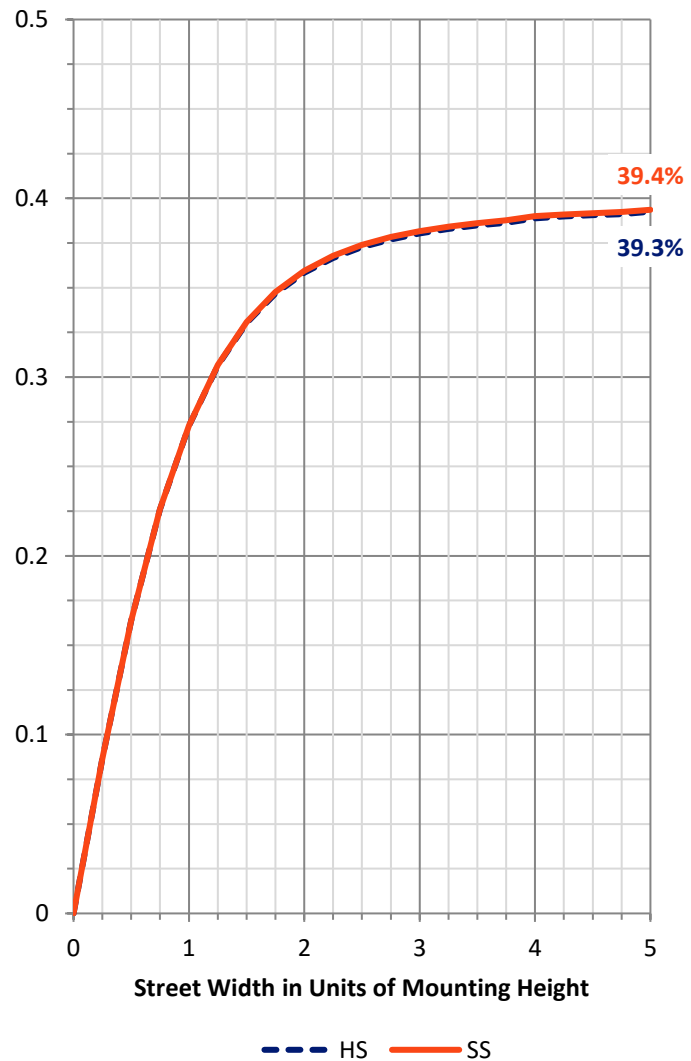
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1377.5	370.3	1747.8
	% Fixture	39.4	10.6	50.0
Street Side	Lumens	1377.5	370.3	1747.8
	% Fixture	39.4	10.6	50.0
Total	Lumens	2755.0	740.7	3495.7
	% Fixture	78.8	21.2	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.6	0.7
10°-20°	76.1	2.2
20°-30°	162.0	4.6
30°-40°	298.5	8.5
40°-50°	480.6	13.7
50°-60°	650.5	18.6
60°-70°	632.5	18.1
70°-80°	368.0	10.5
80°-90°	63.2	1.8
90°-100°	16.5	0.5
100°-110°	168.0	4.8
110°-120°	245.6	7.0
120°-130°	142.5	4.1
130°-140°	75.5	2.2
140°-150°	44.9	1.3
150°-160°	27.6	0.8
160°-170°	15.1	0.4
170°-180°	4.9	0.1
0°-90°	2755.0	78.8
0°-180°	3495.7	100.0



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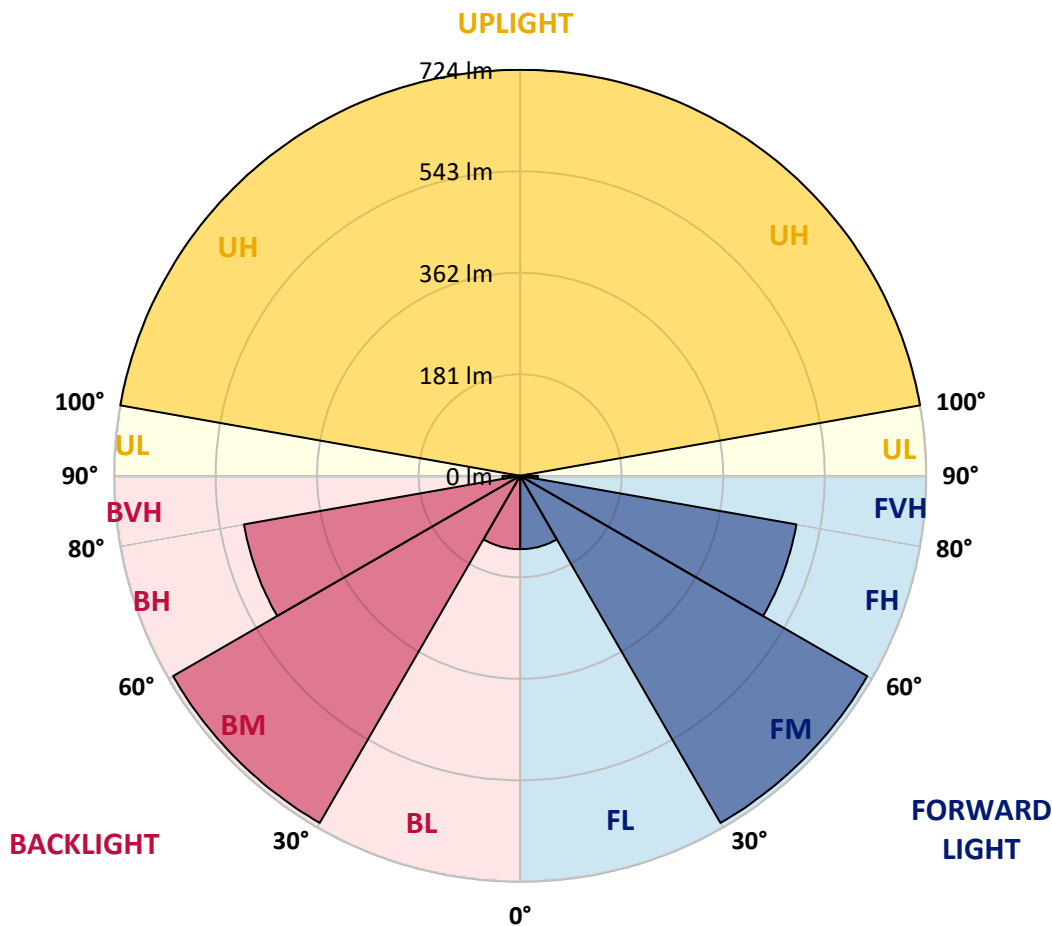
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	130.8	3.7			
FM (30°-60°)	714.8	20.4			
FH (60°-80°)	500.2	14.3			G0/660
FVH (80°-90°)	31.6	0.9			G1/100
BL (0°-30°)	130.8	3.7	B1/500		
BM (30°-60°)	714.8	20.4	B1/1000		
BH (60°-80°)	500.2	14.3	B2/1000		G2/1000
BVH (80°-90°)	31.6	0.9			G1/100
UL (90°-100°)	16.5	0.5		U2/50	
UH (100°-180°)	724.2	20.7		U4/1000	

BUG Rating: B2-U4-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	247.8	247.8	247.8	247.8	247.8	247.8	247.8	247.8	247.8	247.8	247.8
2.5°	247.8	247.8	247.8	247.8	245.3	245.3	245.3	242.8	242.8	242.8	242.8
5°	247.8	247.8	247.8	250.3	250.3	250.3	247.8	247.8	247.8	247.8	247.8
7.5°	247.8	250.3	250.3	247.8	247.8	245.3	245.3	245.3	242.8	242.8	242.8
10°	247.8	247.8	247.8	247.8	245.3	245.3	247.8	247.8	250.3	250.3	250.3
12.5°	245.3	245.3	247.8	247.8	247.8	250.3	255.2	257.7	260.2	262.7	262.7
15°	247.8	247.8	250.3	252.7	255.2	260.2	267.6	275.0	280.0	282.5	280.0
17.5°	247.8	250.3	252.7	257.7	265.1	272.6	285.0	294.9	304.8	307.3	309.7
20°	252.7	252.7	255.2	265.1	277.5	289.9	307.3	324.6	337.0	341.9	341.9
22.5°	255.2	257.7	260.2	272.6	292.4	312.2	337.0	356.8	374.2	384.1	386.6
25°	262.7	262.7	267.6	285.0	309.7	339.5	371.7	401.4	423.7	436.1	438.6
27.5°	267.6	270.1	277.5	299.8	332.0	369.2	413.8	448.5	475.8	490.6	493.1
30°	272.6	275.0	289.9	314.7	354.3	398.9	451.0	495.6	530.3	547.6	550.1
32.5°	280.0	282.5	299.8	327.1	374.2	428.7	488.1	542.7	592.2	607.1	609.6
35°	287.4	289.9	309.7	341.9	396.5	458.4	527.8	592.2	651.7	671.5	676.5
37.5°	294.9	297.3	317.2	356.8	418.8	490.6	572.4	649.2	713.6	740.9	748.3
40°	302.3	304.8	327.1	371.7	441.1	525.3	619.5	703.7	778.1	810.3	815.2
42.5°	307.3	309.7	334.5	384.1	463.4	557.5	669.0	763.2	842.5	884.6	889.6
45°	314.7	317.2	344.4	401.4	483.2	594.7	716.1	830.1	921.8	968.9	973.8
47.5°	319.6	322.1	351.9	411.3	505.5	629.4	765.7	889.6	998.6	1048.1	1063.0
50°	322.1	324.6	356.8	421.2	520.4	654.2	805.3	949.0	1065.5	1127.4	1134.9
52.5°	322.1	327.1	359.3	428.7	530.3	676.5	837.5	998.6	1129.9	1199.3	1201.8
55°	319.6	322.1	356.8	426.2	535.2	686.4	859.8	1028.3	1174.5	1241.4	1263.7
57.5°	309.7	312.2	346.9	418.8	525.3	681.4	854.9	1035.8	1184.4	1248.9	1276.1
60°	294.9	299.8	332.0	401.4	510.4	664.1	840.0	1020.9	1169.6	1248.9	1251.3
62.5°	277.5	280.0	312.2	379.1	488.1	636.8	812.7	991.2	1134.9	1216.6	1214.2
65°	252.7	255.2	282.5	351.9	448.5	584.8	758.2	944.1	1068.0	1154.7	1147.3
67.5°	225.5	228.0	252.7	314.7	401.4	527.8	683.9	864.8	973.8	1063.0	1058.1
70°	195.8	195.8	218.1	270.1	351.9	463.4	602.1	760.7	869.7	944.1	946.6
72.5°	161.1	161.1	180.9	225.5	294.9	389.0	508.0	649.2	738.4	802.8	807.8
75°	126.4	123.9	141.2	178.4	232.9	309.7	401.4	522.8	592.2	654.2	651.7
77.5°	89.2	89.2	99.1	128.9	168.5	230.4	297.3	394.0	441.1	493.1	483.2
80°	57.0	57.0	61.9	84.2	111.5	153.6	195.8	267.6	299.8	339.5	327.1
82.5°	29.7	27.3	32.2	44.6	59.5	84.2	109.0	156.1	171.0	200.7	190.8
85°	9.9	9.9	9.9	14.9	22.3	32.2	42.1	66.9	69.4	89.2	81.8
87.5°	2.5	0.0	0.0	2.5	2.5	2.5	2.5	7.4	7.4	14.9	9.9
90°	6.3	6.3	7.6	7.6	7.6	7.6	7.6	7.6	7.6	6.3	6.3
92.5°	6.3	6.3	6.3	8.9	10.1	8.9	10.1	7.6	7.6	6.3	6.3
95°	7.6	7.6	8.9	11.4	13.9	15.2	15.2	8.9	8.9	7.6	7.6
97.5°	10.1	11.4	11.4	13.9	22.8	41.8	25.3	12.7	12.7	11.4	10.1
100°	16.5	17.7	17.7	31.7	67.2	90.0	64.6	32.9	24.1	17.7	17.7
102.5°	53.2	55.8	68.4	102.6	152.1	138.1	116.6	110.2	76.0	60.8	58.3
105°	135.6	134.3	144.5	171.1	212.9	209.1	192.6	174.9	150.8	139.4	139.4
107.5°	178.7	178.7	187.5	210.4	242.0	282.6	286.4	226.8	198.9	186.3	185.0
110°	201.5	201.5	209.1	228.1	269.9	326.9	324.4	280.0	245.8	229.4	226.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	206.5	207.8	218.0	247.1	292.7	318.1	306.7	288.9	273.7	261.0	258.5
115°	214.2	214.2	225.6	253.4	278.8	288.9	276.2	262.3	252.2	247.1	249.6
117.5°	211.6	215.4	218.0	233.2	249.6	257.2	250.9	231.9	224.3	221.8	218.0
120°	196.4	196.4	198.9	206.5	215.4	219.2	216.7	204.0	197.7	196.4	193.9
122.5°	174.9	176.1	174.9	178.7	185.0	188.8	186.3	176.1	173.6	173.6	171.1
125°	153.3	153.3	152.1	154.6	158.4	157.1	158.4	153.3	152.1	152.1	150.8
127.5°	138.1	136.9	134.3	135.6	136.9	136.9	138.1	133.1	134.3	135.6	134.3
130°	122.9	122.9	120.4	120.4	120.4	117.8	120.4	117.8	119.1	120.4	121.6
132.5°	109.0	109.0	105.2	103.9	103.9	103.9	105.2	103.9	106.4	109.0	109.0
135°	97.6	97.6	93.8	95.0	95.0	93.8	95.0	93.8	96.3	97.6	97.6
137.5°	88.7	88.7	86.2	86.2	86.2	84.9	86.2	86.2	87.4	90.0	91.2
140°	81.1	81.1	79.8	79.8	78.6	79.8	79.8	79.8	81.1	82.4	82.4
142.5°	77.3	76.0	74.8	73.5	74.8	74.8	74.8	73.5	74.8	77.3	77.3
145°	71.0	71.0	69.7	69.7	69.7	71.0	69.7	69.7	71.0	71.0	72.2
147.5°	67.2	67.2	65.9	67.2	67.2	67.2	67.2	65.9	67.2	67.2	68.4
150°	65.9	64.6	63.4	64.6	64.6	63.4	63.4	63.4	63.4	64.6	64.6
152.5°	62.1	62.1	60.8	62.1	60.8	60.8	60.8	60.8	60.8	62.1	63.4
155°	59.6	59.6	58.3	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
157.5°	57.0	58.3	57.0	57.0	57.0	57.0	57.0	57.0	57.0	58.3	58.3
160°	55.8	55.8	55.8	55.8	54.5	54.5	54.5	55.8	55.8	55.8	57.0
162.5°	54.5	54.5	54.5	54.5	53.2	53.2	53.2	53.2	54.5	54.5	55.8
165°	54.5	53.2	53.2	53.2	52.0	52.0	52.0	52.0	53.2	54.5	53.2
167.5°	52.0	52.0	52.0	52.0	52.0	50.7	50.7	52.0	52.0	52.0	53.2
170°	52.0	52.0	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	52.0
172.5°	52.0	52.0	52.0	52.0	50.7	50.7	50.7	50.7	50.7	52.0	52.0
175°	52.0	52.0	52.0	52.0	50.7	50.7	50.7	52.0	52.0	52.0	50.7
177.5°	52.0	52.0	52.0	52.0	50.7	52.0	52.0	52.0	52.0	52.0	52.0
180°	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0

(END OF REPORT)